

Mastercraft Cabinets, Inc.
305 South Brooks Circle
Permit Number V97-004
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May 10, 2006

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APPENDIX A: EQUIPMENT LIST

APPENDIX B: INSIGNIFICANT EQUIPMENT LIST

APPENDIX C: PERMITTED UNINSTALLED EQUIPMENT LIST

Mastercraft Cabinets, Inc.
305 South Brooks Circle
Permit Number V97-004
May 10, 2006

**Mastercraft Cabinets, Inc.
305 South Brooks Circle
Permit Number V97-004
January 5, 2005**

In accordance with Maricopa County Air Pollution Control Rules and Regulations (Rules), Rule 210 § 302.2, all Conditions of this Permit are federally enforceable unless they are identified as being locally enforceable only. However, any Permit Condition identified as locally enforceable only will become federally enforceable if, during the term of this Permit, the underlying requirement becomes a requirement of the Clean Air Act (CAA) or any of the CAA's applicable requirements.

All federally enforceable terms and conditions of this Permit are enforceable by the Administrator of the United States Environmental Protection Agency (Administrator or Administrator of the USEPA hereafter) and citizens under Section 304 of the CAA.

Any cited regulatory paragraphs or section numbers refer to the version of the regulation that was in effect on the first date of public notice of the applicable Permit Condition unless specified otherwise.

GENERAL CONDITIONS:

- 1. AIR POLLUTION PROHIBITED:** [County Rule 100 §301] [SIP Rule 3]
The Permittee shall not discharge from any source whatever into the atmosphere regulated air pollutants which exceed in quantity or concentration that specified and allowed in the County or State Implementation Plan (SIP) Rules, the Arizona Administrative Code (AAC) or the Arizona Revised Statutes (ARS), or which cause damage to property or unreasonably interfere with the comfortable enjoyment of life or property of a substantial part of a community, or obscure visibility, or which in any way degrade the quality of the ambient air below the standards established by the Maricopa County Board of Supervisors or the Director of the Arizona Department of Environmental Quality (ADEQ).
- 2. CIRCUMVENTION:** [County Rule 100 §104] [40 CFR 60.12] [40 CFR 63.4(b)]
The Permittee shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of regulated air pollutants to the atmosphere, conceals or dilutes an emission which would otherwise constitute a violation of this Permit or any Rule or any emission limitation or standard. The Permittee shall not circumvent the requirements concerning dilution of regulated air pollutants by using more emission openings than is considered normal practice by the industry or activity in question.
- 3. CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS:**
[County Rule 100 §401] [County Rule 210 §§301.7, 302.1e(1), 305.1c(1) & 305.1e]
Any application form, report, or compliance certification submitted under the County Rules or these Permit Conditions shall contain certification by a responsible official of truth, accuracy, and completeness of the application form or report as of the time of submittal. This certification and any other certification required under the County Rules or these Permit Conditions shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- 4. COMPLIANCE:**
A. COMPLIANCE REQUIRED:
1) The Permittee must comply with all conditions of this permit and with all applicable requirements of Arizona air quality statutes and the air quality rules. Compliance with permit terms and conditions does not relieve, modify, or otherwise affect the Permittee's duty to comply with all applicable requirements of Arizona air quality statutes and the Maricopa County Air Pollution Control Regulations. Any permit non-compliance is grounds for enforcement

action; for a permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. Noncompliance with any federally enforceable requirement in this Permit constitutes a violation of the Act. [This Condition is federally enforceable if the condition or requirement itself is federally enforceable and only locally enforceable if the condition or requirement itself is locally enforceable only]

[County Rule 210 §§301.8b(4) & 302.1h(1)]

- 2) The Permittee shall halt or reduce the permitted activity in order to maintain compliance with applicable requirements of Federal laws, Arizona laws, the County Rules, or other conditions of this Permit.

[County Rule 210 §302.1h(2)]

- 3) For any major source operating in a nonattainment area for any pollutant(s) for which the source is classified as a major source, the source shall comply with reasonably available control technology (RACT) as defined in County Rule 100.

[County Rule 210 §302.1(h)(6)] [SIP Rule 220 §302.2]

- 4) For any major source operating in a nonattainment area designated as serious for PM₁₀, for which the source is classified as a major source for PM₁₀, the source shall comply with the best available control technology (BACT), as defined in County Rule 100.

[County Rule 210 §302.1(h)(7)]

B. COMPLIANCE CERTIFICATION REQUIREMENTS:

[County Rule 210 §305.1d]

The Permittee shall file an annual compliance certification with the Control Officer and also with the Administrator of the USEPA. The report shall certify compliance with the terms and conditions contained in this Permit, including emission limitations, standards, or work practices. The certification shall be on a form supplied or approved by the Control Officer and shall include each of the following:

- 1) The identification of each term or condition of the permit that is the basis of the certification;
- 2) The compliance status;
- 3) Whether compliance was continuous or intermittent;
- 4) The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
- 5) Other facts as the Control Officer may require to determine the compliance status of the source.

The annual certification shall be filed at the same time as the second semiannual monitoring report required by the Specific Condition section of these Permit Conditions and every 12 months thereafter.

C. COMPLIANCE PLAN:

[County Rule 210 §305.1g]

Based on the certified information contained in the application for this Permit, the facility is in compliance with all applicable requirements in effect as of the first date of public notice of the proposed conditions for this Permit unless a compliance plan is included in the Specific Conditions section of this Permit. The Permittee shall continue to comply with all applicable requirements and shall meet any applicable requirements that may become effective during the term of this permit on a timely basis. [This Condition is federally enforceable if the applicable requirement itself is federally enforceable and only locally enforceable if the applicable requirement itself is locally enforceable only]

5. CONFIDENTIALITY CLAIMS:

Any records, reports or information obtained from the Permittee under the County Rules or this Permit shall be available to the public, unless the Permittee files a claim of confidentiality in accordance with ARS §49-487(c) which:

- A. precisely identifies the information in the permit(s), records, or reports which is considered confidential, and

- B. provides sufficient supporting information to allow the Control Officer to evaluate whether such information satisfies the requirements related to trade secrets or, if applicable, how the information, if disclosed, could cause substantial harm to the person's competitive position.
The claim of confidentiality is subject to the determination by the Control Officer as to whether the claim satisfies the claim for trade secrets.

[County Rule 100 §402] [County Rule 200 §411]

A claim of confidentiality shall not excuse the Permittee from providing any and all information required or requested by the Control Officer and shall not be a defense for failure to provide such information.

[County Rule 100 §402]

If the Permittee submits information with an application under a claim of confidentiality under ARS §49-487 and County Rule 200, the Permittee shall submit a copy of such information directly to the Administrator of the USEPA.

[County Rule 210 §301.5]

6. CONTINGENT REQUIREMENTS:

NOTE: This Permit Condition covers activities and processes addressed by the CAA which may or may not be present at the facility. This condition is intended to meet the requirements of both Section 504(a) of the 1990 Amendments to the CAA, which requires that Title V permits contain conditions necessary to assure compliance with applicable requirements of the Act as well as the Acid Rain provisions required to be in all Title V permits.

- A. ACID RAIN: [County Rule 210 §§302.1b(2) & 302.1f] [County Rule 371 §301]
- 1). Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the CAA and incorporated under County Rule 371, both provisions shall be incorporated into this Permit and shall be enforceable by the Administrator.
 - 2). The Permittee shall not allow emissions exceeding any allowances that the source lawfully holds under Title IV of the CAA or the regulations promulgated thereunder and incorporated under County Rule 371.
 - a) No permit revision shall be required for increases in emissions that are authorized by allowances acquired under the acid rain program and incorporated under County Rule 371, provided that such increases do not require a permit revision under any other applicable requirement.
 - b) No limit is placed on the number of allowances held by the Permittee. The Permittee may not, however, use allowances as a defense to non-compliance with any other applicable requirement.
 - c) Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the CAA.
 - d) All of the following prohibitions apply to any unit subject to the provisions of Title IV of the CAA and incorporated into this Permit under County Rule 371:
 - (1) Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners or operators of the unit or the designated representative of the owners or operators.
 - (2) Exceedances of applicable emission rates.
 - (3) The use of any allowance prior to the year for which it was allocated.
 - (4) Violation of any other provision of the permit.
- B. ASBESTOS: [40 CFR 61, Subpart M] [County Rule 370 §301.8 - locally enforceable only]
The Permittee shall comply with the applicable requirements of Sections 61.145 through 61.147 and 61.150 of the National Emission Standard for Asbestos and County Rule 370 for all demolition and renovation projects.

- C. **RISK MANAGEMENT PLAN (RMP):** [40 CFR 68]
Should this stationary source, as defined in 40 CFR 68.3, be subject to the accidental release prevention regulations in 40 CFR Part 68, then the Permittee shall submit an RMP by the date specified in 40 CFR Section 68.10 and shall certify compliance with the requirements of 40 CFR Part 68 as part of the annual compliance certification as required by 40 CFR Part 70. However, neither the RMP nor modifications to the RMP shall be considered to be a part of this Permit.

- D. **STRATOSPHERIC OZONE PROTECTION:** [40 CFR 82 Subparts E, F, and G]
If applicable, the Permittee shall follow the requirements of 40 CFR 82.106 through 82.124 with respect to the labeling of products using ozone depleting substances.

If applicable, the Permittee shall comply with all of the following requirements with respect to recycling and emissions reductions:

- 1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices under 40 CFR 82.156.
- 2) Equipment used during maintenance, service, repair, or disposal of appliances must meet the standards for recycling and recovery equipment in accordance with 40 CFR 82.158.
- 3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by a certified technician under 40 CFR 82.161.

If applicable, the Permittee shall follow the requirements of 40CFR 82 Subpart G, including all Appendices, with respect to the safe alternatives policy on the acceptability of substitutes for ozone-depleting compounds.

7. **DUTY TO SUPPLEMENT OR CORRECT APPLICATION:** [County Rule 210 §301.6]
If the Permittee fails to submit any relevant facts or has submitted incorrect information in a permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, the Permittee shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a proposed permit.

8. **EMERGENCY EPISODES:** [County Rule 600 §302] [SIP Rule 600 §302]
If an air pollution alert, warning, or emergency has been declared, the Permittee shall comply with any applicable requirements of County Rule 600 §302.

9. **EMERGENCY PROVISIONS:** [County Rule 130 §§201 & 402]
An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, that require immediate corrective action to restore normal operation, and that cause the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

An emergency constitutes an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the requirements of this Permit Condition are met.

The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- A. An emergency occurred and that the Permittee can identify the cause or causes of the emergency;
- B. At the time of the emergency, the permitted source was being properly operated;
- C. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in this permit; and

- D. The Permittee as soon as possible telephoned the Control Officer, giving notice of the emergency, and submitted notice of the emergency to the Control Officer by certified mail, facsimile, or hand delivery within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirement of County Rule 210 §302.1.e(2) with respect to deviation reporting. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

This provision is in addition to any emergency or upset provision contained in any applicable requirement.

10. EXCESS EMISSIONS: [County Rule 140 §§103, 401 & 402]

NOTE: There are reporting requirements associated with excess emissions. These requirements are contained in the Reporting section of the General Permit Conditions in a subparagraph called Excess Emissions. The definition of excess emissions can be found in County Rule 100 §200.

- A. Exemptions: The excess emissions provisions of this Permit Condition do not apply to the following standards and limitations:
- 1) Promulgated pursuant to Section 111 (Standards Of Performance for New Stationary Sources) of the Clean Air Act (Act) or Section 112 (National Emission Standards For Hazardous Air Pollutants) of the Act;
 - 2) Promulgated pursuant to Title IV (Acid Deposition Control) of the Act or the regulations promulgated thereunder and incorporated under Rule 371 (Acid Rain) of these rules or Title VI (Stratospheric Ozone Protection) of the Act;
 - 3) Contained in any Prevention Of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the Environmental Protection Agency (EPA);
 - 4) Included in a permit to meet the requirements of Rule 240 (Permit Requirements For New Major Sources And Major Modifications To Existing Major Sources), Subsection 308.1(e) (Permit Requirements For Sources Located In Attainment And Unclassified Areas) of these rules.
- B. Affirmative Defense For Malfunctions: Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. The owner and/or operator of a source with emissions in excess of an applicable emission limitation due to malfunction has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner and/or operator of the source has complied with the excess emissions reporting requirements of these Permit Conditions and has demonstrated all of the following:
- 1) The excess emissions resulted from a sudden and unavoidable breakdown of the process equipment or the air pollution control equipment beyond the reasonable control of the operator;
 - 2) The source's air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
 - 3) If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, then the owner and/or operator satisfactorily demonstrated that such measures were impractical;
 - 4) The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
 - 5) All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
 - 6) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;

- 7) During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in County Rule 510 that could be attributed to the emitting source;
 - 8) The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;
 - 9) All emissions monitoring systems were kept in operation, if at all practicable; and
 - 10) The owner's and/or operator's actions in response to the excess emissions were documented by contemporaneous records.
- C. Affirmative Defense For Startup And Shutdown:
- 1) Except as provided in paragraph 2) below, and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to startup and shutdown shall constitute a violation. The owner and/or operator of a source with emissions in excess of an applicable emission limitation due to startup and shutdown has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner and/or operator of the source has complied with the excess emissions reporting requirements of these Permit Conditions and has demonstrated all of the following:
 - a. The excess emissions could not have been prevented through careful and prudent planning and design;
 - b. If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;
 - c. The source's air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
 - d. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable, during periods of such emissions;
 - e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
 - f. During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in County Rule 510 (Air Quality Standards) that could be attributed to the emitting source;
 - g. All emissions monitoring systems were kept in operation, if at all practicable; and
 - h. The owner's and/or operator's actions in response to the excess emissions were documented by contemporaneous records.
 - 2) If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to paragraph A. of this Permit Condition.
- D. Affirmative Defense For Malfunctions During Scheduled Maintenance: If excess emissions occur due to malfunction during scheduled maintenance, then those instances will be treated as other malfunctions subject to paragraph B. of this Permit Condition.
- E. Demonstration Of Reasonable And Practicable Measures: For an affirmative defense under paragraphs A and B of this Permit Condition, the owner and/or operator of the source shall demonstrate, through submission of the data and information required by this Permit Condition and the excess emissions reporting requirements of these Permit Conditions, that all reasonable and practicable measures within the owner's and/or operator's control were implemented to prevent the occurrence of the excess emissions.

- 11. FEES:** [County Rule 200 §409] [County Rule 210 §§302.1i & 401]
The Permittee shall pay fees to the Control Officer under ARS 49-480(D) and County Rule 280.
- 12. MODELING:** [County Rule 200 §407] [locally enforceable only]
Where the Control Officer requires the Permittee to perform air quality impact modeling, the Permittee shall perform the modeling in a manner consistent with the "Guideline on Air Quality Models (Revised)" (EPA-450/2-78-027R, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, July 1986) and "Supplement B to the Guideline on Air Quality Models" (U.S. Environmental Protection Agency, September 1990). Both documents shall be referred to hereinafter as "Guideline", and are adopted by reference. Where the person can demonstrate that an air quality impact model specified in the guideline is inappropriate, the model may be modified or another model substituted if found to be acceptable to the Control Officer.
- 13. MONITORING / TESTING:**
- A. The Permittee shall monitor, sample, or perform other studies to quantify emissions of regulated air pollutants or levels of air pollution that may reasonably be attributable to the facility if required to do so by the Control Officer, either by Permit or by order in accordance with County Rule 200 §309.
[County Rule 200 §309] [SIP Rule 41]
- B. Except as otherwise specified in these Permit Conditions or by the Control Officer, the Permittee shall conduct required testing used to determine compliance with standards or permit conditions established under the County or SIP Rules or these Permit Conditions in accordance with County Rule 270 and the applicable testing procedures contained in the applicable Rule, the Arizona Testing Manual for Air Pollutant Emissions or other approved USEPA test methods.
[County Rule 200 §408] [County Rule 210 §302.1.c] [County Rule 270 §§300 & 400]
[SIP Rule 27]
- C. The Permittee of a permitted source shall provide, or cause to be provided, performance testing facilities as follows:
- 1) Sampling ports adequate for test methods applicable to such source.
 - 2) Safe sampling platform(s).
 - 3) Safe access to sampling platforms(s).
 - 4) Utilities for sampling and testing equipment.
- [County Rule 270 §405] [SIP Rule 42]
- 14. PERMITS:**
- A. BASIC: [County Rule 210 §302.1h(3)]
This Permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any Permit Condition.
- B. DUST CONTROL PLAN REQUIREMENTS:
(NOTE: If the Permittee engages in or allows any routine dust generating activities at the facility, the Permittee needs to have the routine dust generating activity covered as part of this Permit. Nonroutine activities, such as construction, require a separate Earthmoving Permit that must be obtained from the Control Officer before the activity may begin.)
- 1) The Permittee must first submit a Dust Control Plan and obtain the Control Officer's approval of the Dust Control Plan before commencing any routine dust generating operation.
[County Rule 310 §303.3] [SIP Rule 310 §303.3]
 - 2) A Dust Control Plan shall not be required to play on a ball field and/or for landscape maintenance. For the purpose of this Permit Condition, landscape maintenance does not include grading, trenching, nor any other mechanized surface disturbing activities.

[County Rule 310 §303.4] [SIP Rule 310 §303.4]

- 3) Any Dust Control Plan shall, at a minimum, contain all the information described in Section 304 of Rule 310.

[County Rule 310 §§303.1 & 304] [SIP Rule 310 §§303.1 & 304]

- 4) Regardless of whether an approved Dust Control Plan is in place or not, the Permittee is still subject to all requirements of Rule 310 at all times.

[County Rule 310 §303] [SIP Rule 310 §303]

C. PERMITS AND PERMIT CHANGES, AMENDMENTS AND REVISIONS:

- 1) The Permittee shall comply with the Administrative Requirements of Section 400 of County Rule 210 for all changes, amendments and revisions at the facility for any source subject to regulation under County Rule 200, shall comply with all required time frames, and shall obtain any required preapproval from the Control Officer before making changes. All applications shall be filed in the manner and form prescribed by the Control Officer. The application shall contain all the information necessary to enable the Control Officer to make the determination to grant or to deny a permit or permit revision including information listed in County Rule 200 §308 and County Rule 210 §§301 & 302.3.

[County Rule 200 §§301 & 308] [County Rule 210 §§301.4a, b, c, & 400]

- 2) The Permittee shall supply a complete copy of each application for a permit, a minor permit revision, or a significant permit revision directly to the Administrator of the USEPA. The Control Officer may require the application information to be submitted in a computer-readable format compatible with the Administrator's national database management system.

[County Rule 210 §§303.1a, 303.2, 405.4, & 406.4]

- 3) While processing an application, the Control Officer may require the applicant to provide additional information and may set a reasonable deadline for a response.

[County Rule 210 §301.4f]

- 4) No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

[County Rule 210 §302.1j]

D. POSTING:

- 1) The Permittee shall keep a complete permit clearly visible and accessible on the site where the equipment is installed.

[County Rule 200 §311]

- 2) If a Dust Control Plan, as required by Rule 310, has been approved by the Control Officer, the Permittee shall post a copy of the approved Dust Control Plan in a conspicuous location at the work site, within on-site equipment, or in an on-site vehicle, or shall otherwise keep a copy of the Dust Control Plan available on site at all times.

[County Rule 310 §401] [SIP Rule 310 §401]

E. PROHIBITION ON PERMIT MODIFICATION:

[County Rule 200 §310]

The Permittee shall not willfully deface, alter, forge, counterfeit, or falsify this permit.

F. RENEWAL:

- 1) The Permittee shall submit an application for the renewal of this Permit in a timely and complete manner. For purposes of permit renewal, a timely application is one that is submitted at least six months, but not more than 18 months, prior to the date of permit expiration. A complete application shall contain all of the information required by the County Rules including Rule 200 §308 and Rule 210 §§301 & 302.3.
[County Rule 210 §§301.2a, 301.4a, b, c, d, h & 302.3]
- 2) The Permittee shall file all permit applications in the manner and form prescribed by the Control Officer. To apply for a permit renewal, the Permittee shall complete the "Standard Permit Application Form" and shall supply all information, including the information required by the "Filing Instructions" as shown in Appendix B of the County Rules, which is necessary to enable the Control Officer to make the determination to grant or to deny a permit which shall contain such terms and conditions as the Control Officer deems necessary to assure a source's compliance with the requirements of the CAA, ARS and County Rules.
[County Rule 200 §§308 & 309] [County Rule 210 §301.1]
- 3) The Control Officer may require the Permittee to provide additional information and may set a reasonable deadline for a response.
[County Rule 210 §301.4f]
- 4) If the Permittee submits a timely and complete application for a permit renewal, but the Control Officer has failed to issue or deny the renewal permit before the end of the term of the previous permit, then the permit shall not expire until the renewal permit has been issued or denied. This protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit, by the deadline specified by the Control Officer, any additional information identified as being needed to process the application.

[County Rule 200 §403.2] [County Rule 210 §§301.4f & 301.9]

G. REVISION / REOPENING / REVOCATION:

- 1) This permit shall be reopened and revised to incorporate additional applicable requirements adopted by the Administrator pursuant to the CAA that become applicable to the facility if this permit has a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this Permit is due to expire unless the original permit or any of its terms have been extended pursuant to Rule 200 §403.2.

[County Rules 200 §402.1]

Any permit revision required under this Permit Condition, 14.G.1, shall reopen the entire permit and shall comply with provisions in County Rule 200 for permit renewal (*Note: this includes a facility wide application and public comment on the entire permit*) and shall reset the five year permit term.

[County Rules 200 §402.1a(1) & 210 §302.5]

- 2) This permit shall be reopened and revised under any of the following circumstances:
 - a) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by

the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Title V permit.

- b) The Control Officer or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- c) The Control Officer or the Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

Proceedings to reopen and issue a permit under this Permit Condition, 14.G.2, shall follow the same procedures as apply to initial permit issuance and shall effect only those parts of the Permit for which cause to reopen exists.

[County Rule 200 §402.1]

- 3) This permit shall be reopened by the Control Officer and any permit shield revised, when it is determined that standards or conditions in the permit are based on incorrect information provided by the applicant.

[County Rule 210 §407.3]

- 4) This Permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Permit revision, revocation and reissuance, or termination or of a notification of planned changes or anticipated noncompliance does not stay any Permit Condition.

[County Rule 210 §302.1h(3)]

H. REVISION UNDER A FEDERAL HAZARDOUS AIR POLLUTANT STANDARD:

[County Rule 210 §301.2c] [locally enforceable only]

If the Permittee becomes subject to a standard promulgated by the Administrator under Section 112(d) of the CAA, the Permittee shall, within 12 months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

I. REQUIREMENTS FOR A PERMIT:

- 1) Air Quality Permit: Except as noted under the provisions in Sections 403 and 405 of County Rule 210, no source may operate after the time that it is required to submit a timely and complete application, except in compliance with a permit issued under County Rule 210. Permit expiration terminates the Permittee's right to operate. However, if a source submits a timely and complete application, as defined in County Rule 210 §301, for permit issuance, revision, or renewal, the source's failure to have a permit is not a violation of the County Rules until the Control Officer takes final action on the application. The Source's ability to operate without a permit as set forth in this paragraph shall be in effect from the date the application is determined to be complete until the final permit is issued. This protection shall cease to apply if, subsequent to the completeness determination, the applicant fails to submit, by the deadline specified in writing by the Control Officer, any additional information identified as being needed to process the application. If a source submits a timely and complete application for a permit renewal, but the Control Officer has failed to issue or deny the renewal permit before the end of the term of the previous permit, then the permit shall not expire until the permit renewal has been issued or denied.

[County Rule 210 §301.9]

2) Earthmoving Permit:

(NOTE: If the Permittee engages in or allows any routine dust generating activities at the facility, the Permittee needs to have the routine dust generating activity covered as part of this Permit. Non-routine activities, such as construction, require a separate Earthmoving Permit that must be obtained from the Control Officer before the activity may begin.)

The Permittee shall not cause, commence, suffer, allow, or engage in any earthmoving operation that disturbs a total surface area of 0.10 acre or more without first obtaining a permit from the Control Officer. Permits shall not be required for earthmoving operations for emergency repair of utilities, paved roads, unpaved roads, shoulders, and/or alleys.

[County Rule 200 §305]

3) Burn Permit: The Permittee shall obtain a Permit To Burn from the Control Officer before conducting any open outdoor fire except for the activities listed in County Rule 314 §§302.1 and 302.2.

[County Rule 314] [County Rule 200 §306] [SIP Rule 314]

J. RIGHTS AND PRIVILEGES:

[County Rule 210 §302.1h (4)]

This Permit does not convey any property rights nor exclusive privilege of any sort.

K. SEVERABILITY:

The provisions of this Permit are severable, and, if any provision of this Permit is held invalid, the remainder of this Permit shall not be affected thereby.

L. SCOPE:

The issuance of any permit or permit revision shall not relieve the Permittee from compliance with any Federal laws, Arizona laws, or the County or SIP Rules, nor does any other law, regulation or permit relieve the Permittee from obtaining a permit or permit revision required under the County Rules.

[County Rule 200 §308]

Nothing in this permit shall alter or affect the following:

- 1) The provisions of Section 303 of the Act (Emergency Orders), including the authority of the Administrator of the USEPA under that section.
- 2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.
- 3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act.
- 4) The ability of the Administrator of the USEPA or of the Control Officer to obtain information from the Permittee under Section 114 of the Act, or any provision of State law.
- 5) The authority of the Control Officer to require compliance with new applicable requirements adopted after the permit is issued. [locally enforceable only]

[County Rule 210 §407.2]

M. TERM OF PERMIT:

[County Rule 210 §§302.1a & 402]

This Permit shall remain in effect for no more than 5 years from the date of issuance.

- N. TRANSFER: [County Rule 200 §404]
Except as provided in ARS §49-429 and County Rule 200, this permit may be transferred to another person if the Permittee gives notice to the Control Officer in writing at least 30 days before the proposed transfer and complies with the permit transfer requirements of County Rule 200 and the administrative permit amendment procedures under County Rule 210.

15. RECORDKEEPING:

- A. RECORDS REQUIRED: [County Rule 100 §501] [County Rule 310 §502] [SIP Rule 40 A]
The Permittee shall maintain records of all emissions testing and monitoring, records detailing all malfunctions which may cause any applicable emission limitation to be exceeded, records detailing the implementation of approved control plans and compliance schedules, records required as a condition of any permit, records of materials used or produced, and any other records relating to the emission of air contaminants which may be requested by the Control Officer.

- B. RETENTION OF RECORDS:
Unless a longer time frame is specified by these Permit Conditions, information and records required by applicable requirements and copies of summarizing reports recorded by the Permittee and submitted to the Control Officer shall be retained by the Permittee for 5 years after the date on which the information is recorded or the report is submitted
[County Rule 100 §504] [SIP Rule 40 C]

The Permittee shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

[County Rule 210 §§302.1d(2)]

- C. MONITORING RECORDS: [County Rule 210 §§302.1d(1) & 305.1b]
Records of any monitoring required by this Permit shall include the following:
1) The date, place as defined in the permit, and time of sampling or measurements;
2) The date(s) analyses were performed;
3) The name of the company or entity that performed the analysis;
4) The analytical techniques or methods used;
5) The results of such analysis; and
6) The operating conditions as existing at the time of sampling or measurement.

- D. RIGHT OF INSPECTION OF RECORDS: [County Rule 100 §106] [SIP Rule 40 D]
When the Control Officer has reasonable cause to believe that the Permittee has violated or is in violation of any provision of County Rule 100 or any County Rule adopted under County Rule 100, or any requirement of this permit, the Control Officer may request, in writing, that the Permittee produce all existing books, records, and other documents evidencing tests, inspections, or studies which may reasonably relate to compliance or noncompliance with County Rules adopted under County Rule 100. No person shall fail nor refuse to produce all existing documents required in such written request by the Control Officer.

16. REPORTING:

NOTE: See the Permit Condition titled Certification Of Truth, Accuracy and Completeness in conjunction with reporting requirements.

A. ANNUAL EMISSION INVENTORY REPORT: [County Rule 100 §505] [SIP Rule 40 B]

Upon request of the Control Officer and as directed by the Control Officer, the Permittee shall complete and shall submit to the Control Officer an annual emissions inventory report. The report is due by April 30, or 90 days after the Control Officer makes the inventory form(s) available, whichever occurs later.

The annual emissions inventory report shall be in the format provided by the Control Officer.

The Control Officer may require submittal of supplemental emissions inventory information forms for air contaminants under ARS §49-476.01, ARS §49-480.03 and ARS §49-480.04.

B. DATA REPORTING: [County Rule 100 §502]

When requested by the Control Officer, the Permittee shall furnish to the Maricopa County Air Quality Division (Division hereafter) information to locate and classify air contaminant sources according to type, level, duration, frequency, and other characteristics of emissions and such other information as may be necessary. This information shall be sufficient to evaluate the effect on air quality and compliance with the County or SIP Rules. The Permittee may subsequently be required to submit annually, or at such intervals specified by the Control Officer, reports detailing any changes in the nature of the source since the previous report and the total annual quantities of materials used or air contaminants emitted.

C. DEVIATION REPORTING: [County Rule 210 §§302.1e & 305.1c]

The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions. Unless specified otherwise elsewhere in these Permit Conditions, an upset for the purposes of this Permit Condition shall be defined as the operation of any process, equipment or air pollution control device outside of either its normal design criteria or operating conditions specified in this Permit and which results in an exceedance of any applicable emission limitation or standard. The Permittee shall submit the report to the Control Officer within 2 working days from knowledge of the deviation. The report shall contain a description of the probable cause of such deviations and any corrective actions or preventive measures taken. In addition, the Permittee shall report within a reasonable time of any long-term corrective actions or preventative actions taken as the result of any deviations from permit requirements.

All instances of deviations from the requirements of this Permit shall also be clearly identified in the semiannual monitoring reports required in the Specific Condition section of these Permit Conditions.

D. EMERGENCY REPORTING: [County Rule 130 §402.4]

(NOTE: Emergency Reporting is one of the special requirements which must be met by a Permittee wishing to claim an affirmative defense under the emergency provisions of County Rule 130. These provisions are listed earlier in these General Conditions in the section titled "Emergency Provisions". Since it is a form of deviation reporting, the filing of an emergency report also satisfies the requirement of County Rule 210 to file a deviation report.)

The Permittee shall, as soon as possible, telephone the Control Officer giving notice of the emergency, and submitted notice of the emergency to the Control Officer by certified mail,

facsimile, or hand delivery within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

E. EMISSION STATEMENTS REQUIRED AS STATED IN THE ACT:

[County Rule 100 §503]

Upon request of the Control Officer and as directed by the Control Officer, the Permittee shall provide the Control Officer with an emission statement, in such form as the Control Officer prescribes, showing measured actual emissions or estimated actual emissions of NO_x and volatile organic compounds (VOC) from that source. At a minimum, the emission statement shall contain all information contained in the "Guidance on Emission Statements" document as described in the USEPA's Aerometric Information Retrieval System (AIRS) Fixed Format Report (AFP 644). The statement shall contain emissions for the time period specified by the Control Officer. Statements shall be submitted annually.

F. EXCESS EMISSIONS REPORTING: [County Rule 140 §500] [locally enforceable only]

(NOTE: This reporting subsection is associated with the requirements listed earlier in these General Conditions in the section titled "Excess Emissions".)

- 1) The owner and/or operator of any source shall report to the Control Officer any emissions in excess of the limits established by the County or SIP Rules or by these Permit Conditions. The report shall be in two parts as specified below:
 - a) Notification by telephone or facsimile within 24 hours of the time when the owner and/or operator first learned of the occurrence of excess emissions that includes all available information from paragraph 2) of this Permit Condition.
 - b) Detailed written notification by submission of an excess emissions report within 72 hours of the notification required by paragraph 1) a) of this Permit Condition.
- 2) The excess emissions report shall contain the following information:
 - a) The identity of each stack or other emission point where the excess emissions occurred;
 - b) The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
 - c) The time and duration or expected duration of the excess emissions;
 - d) The identity of the equipment from which the excess emissions emanated;
 - e) The nature and cause of such emissions;
 - f) The steps taken, if the excess emissions were the result of a malfunction, to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions;
 - g) The steps that were or are being taken to limit the excess emissions; and
 - h) If this Permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from startup or malfunction, a list of the steps taken to comply with the Permit procedures.
- 3) In the case of continuous or recurring excess emissions, the notification requirements of this Permit Condition shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in the notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to paragraphs 1) and 2) of this Permit Condition.

- G. OTHER REPORTING: [County Rule 210 §302.1h(5)]
The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer may request in writing to determine whether cause exists for revising, revoking and reissuing this permit, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Control Officer copies of records required to be kept by this Permit. For information claimed to be confidential, the Permittee shall furnish a copy of such records directly to the Administrator of the USEPA along with a claim of confidentiality as covered elsewhere in these Permit Conditions.

17. RIGHT TO ENTRY AND INSPECTION OF PREMISES:

The Control Officer, during reasonable hours, for the purpose of enforcing and administering County Rules or any provision of ARS relating to the emission or control prescribed pursuant thereto, may enter every building, premises, or other place, except the interior of structures used as private residences. Every person is guilty of a petty offense under ARS §49-488 who in any way denies, obstructs or hampers such entrance or inspection that is lawfully authorized by warrant.
[County Rule 100 §105]

The Permittee shall allow the Control Officer or his authorized representative, upon presentation of proper credentials and other documents as may be required by law, to:

- A. Enter upon the Permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;
[County Rule 210 §305.1f] [SIP Rule 43]
- B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
[County Rule 210 §305.1f] [SIP Rule 43]
- C. Inspect, at reasonable times, any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
[County Rule 210 §305.1f] [SIP Rule 43]
- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
[County Rule 210 §305.1f] [SIP Rule 43]
- E. To record any inspection by use of written, electronic, magnetic, and photographic media.
[County Rule 210 §305.1f] [Locally enforceable only]

SPECIFIC CONDITIONS:

18. ALLOWABLE EMISSIONS LIMITATIONS

- A. Facility-Wide Requirements
1) The Permittee shall limit the emissions from the facility in accordance with the following table:

Pollutant	Daily Limit, lbs./day	Rolling 12 Month Limit, Tons
Volatile Organic Compounds	2,397	163.6

The rolling 12 month limit shall be calculated by summing the monthly emissions for the most recent

12 calendar months.

[County Rule 210 §301.8b][County Rule 240]

2) Particulate Matter Limits

Wood Furniture Manufacturing

- a) The Permittee shall not discharge or cause or allow the discharge of particulate matter into the ambient air from any affected operation in excess of the allowable hourly emission rate determined by the following equation:

$$E = 3.59 P^{0.62} \qquad \text{Equation (1)}$$

Where:

E = Emissions in pounds per hour, and

P = Process weight rate in tons per hour.

[County Rule 311 §301.1][SIP Rule 311 §301.1]

The total process weight from all similar operations at a facility, plant or premises shall be used for determining the maximum allowable emissions of particulate matter.

[County Rule 311 §302][SIP Rule 311 §302]

- b) In the event that the Permittee exceed the applicable standard set forth in County Rule 311 §301.1 and above, the Permittee shall comply by installing and operating an approved emission control system.

[County Rule 311 §304][SIP Rule 311 §304]

3) Opacity Limits

- a) The Permittee shall not discharge into the ambient air from any single source of emissions any air contaminant, other than uncombined water, in excess of 20 percent opacity, except as provided in County Rule 300 §302.

[County Rule 300 §§301 and 302][locally enforceable only]

- b) Except as otherwise provided in Regulation I, Rule 4, Exceptions, the opacity of any plume or effluent from any source of emissions, other than uncombined water, shall not be greater than 40 percent opacity as determined by Reference Method 9 in the Arizona Testing Manual.

[SIP Rule 30]

19. OPERATIONAL LIMITATIONS AND STANDARDS

A. Facility-Wide Operational Requirements

- 1) The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under his control in such quantities or concentrations as to cause air pollution.

[County Rule 320 §300][locally enforceable only]

- 2) Materials including, but not limited to, solvents or other volatile compounds, paints, acids, alkalis, pesticides, fertilizer and manure shall be processed, stored, used and transported in such a manner and by such means that they will not unreasonably evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation,

leakage or discharge, the installation and use of such control methods, devices or equipment shall be mandatory.

[County Rule 320 §302][SIP Rule 32C]

- 3) Where a stack, vent or other outlet is at such a level that air contaminants are discharged to adjoining property, the Control Officer may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet to a degree that will adequately dilute, reduce or eliminate the discharge of air contaminants to adjoining property.

[County Rule 320 §303][SIP Rule 32D]

B. Operational Requirements for Woodworking Equipment

The Permittee shall install, operate and maintain an approved emission control device on all wood working equipment vented outdoors. Such woodworking equipment shall be vented to the device without bypass.

[County Rule 100 §301][County Rule 241 §302] [SIP Rule 3]

C. Operational Requirements for Baghouses

- 1) The Permittee shall operate and maintain each baghouse in accordance with the requirements of the Operations and Maintenance (O&M) Plan for that piece of equipment most recently submitted to the control officer.

[County Rule 210 §302.1c][County Rule 311 §306][SIP Rule 311 §306]

- 2) Measurement of a pressure differential outside of the applicable parametric range of 0.4 to 6.0 inches of water shall require the Permittee to investigate and take corrective action if necessary to bring the control device into proper operation.

[County Rule 311 §305][SIP Rule 305]

- 3) The Permittee shall operate the particulate control devices (baghouses) to demonstrate compliance with County and SIP Rule 311 using the measured outlet concentration and Equation (1) from County Rule 311 Section 311.1.

[County Rule 311 §301] [SIP Rule 311 §301]

D. Operational Requirements for Spray Coating Equipment

[County Rule 315 §301][locally enforceable only]

- 1) The Permittee shall not use or operate any spray painting or spray coating equipment unless one of the following conditions is met:

- a) The Permittee shall not operate spray coating equipment outside of a building unless it is operated inside an enclosure which has at least three sides a minimum of eight feet in height and able to contain any object(s) being coated.

- (1) For three-sided enclosures, the Permittee shall direct the spray in a horizontal or downward pointing manner so that overspray is directed at the walls or floor of the enclosure. No spraying shall be conducted within three feet of any open end and/or within two feet of the top of the enclosure.

- (2) For enclosures with three sides and a roof, or for complete enclosures, the Permittee shall direct the spray into the enclosure so that the overspray is directed away from any opening in the enclosure. No spraying shall be conducted within three feet of any open end and/or within two feet of any open top of the enclosure.

- b) The Permittee shall install and operate a filtering system on any spray booth or enclosure with forced air exhaust.

- (1) The filtering system shall have an average overspray removal efficiency of at least ninety-two percent (92%) by weight, as specified in writing by the manufacturer, for the type of material being sprayed.
- (2) No gaps, sags or holes shall be present in the filters and all exhaust must be discharged into the atmosphere. Spray booths or enclosures utilizing a water curtain shall be operated such that the water curtain is distributed uniformly across the entire surface area of the booth.

[County Rule 315 §301.2] [locally enforceable only]

- 2) The controls required for spray coating in County Rule 315 §301, and the conditions of this Permit based upon that requirement, above, shall not apply:
 - a) To the spray coating of buildings or dwellings, including appurtenances and any other ornamental objects that are not normally removed prior to coating;
 - b) To the spray coating of facility equipment or structures which are fixed in a permanent location and cannot easily be moved into an enclosure or spray booth and which are not normally dismantled or moved prior to coating;
 - c) To the spray coating of objects which cannot fit inside of an enclosure with internal dimensions of 10'W x 25'L x 8'H;
 - d) To enclosures and spray booths and exhausts located entirely in a completely enclosed building, providing that any vents or openings do not allow overspray to be emitted into the outside air; or
 - e) To any coating operations utilizing only hand-held aerosol cans.

[County Rule 315 §302] [locally enforceable only]

E. Operational Requirements for Coating Wood Furniture and Fixtures

- 1) VOC Content Limitation [County Rule 342 §301.1][SIP Rule 342 §301.1]
The Permittee shall not apply a topcoat or sealer to wood furniture or fixtures unless the VOC content is limited either to the pounds of VOC per pound of solids (kilogram VOC per kilogram of solids) in Column A, or to the grams of VOC per liter in Column B of Table 342-1 below, unless covered by an exemption listed in these permit conditions.

Table 342-1: General VOC Limits of Coatings

Type of Coating	Column A	Column B
	(pounds of VOC per pound of solids)	(grams of VOC per liter, less non-precursor compounds and water)
Topcoat	1.8	635
Sealer	1.9	645
Acid-cured, alkyd amino topcoat	2.0	655
Acid-cured, alkyd amino vinyl sealer	2.3	680

- 2) When a sealer's topcoat does not exceed 0.8 pound of VOC per pound of solids (0.8 kilogram of VOC per kilogram of solids), there is no limit on the VOC content of the sealer.

[County Rule 342 §301.1b][SIP Rule 342 §301.1b]

- 3) Stains, washcoats, glazes, toners, inks, and other coatings not specified in Table 342-1 or the strippable booth coating requirements of these Permit Conditions, do not have limits on VOC content.

[County Rule 342 §301.2][SIP Rule 342 §301.2]

- 4) The Permittee shall not use a strippable booth coating unless, as applied, the coating has no more than 0.8 pounds of VOC per pound of solids or no more than 3.0 pounds of VOC per gallon (360 grams per liter), less non-precursor volatile compounds.

[County Rule 342 §301.2][SIP Rule 342 §301.2]

- 5) Spray Equipment Requirements for Coating Wood Furniture and Fixtures

- a) The Permittee shall not spray wood furniture with coating exceeding 1.0 pound of VOC per pound of solids (1.0 kilogram of VOC per kilogram of solids) without providing evidence of possession and use of a low-pressure spray gun or system, an electrostatic system, or a system in which the energy for atomization is provided principally via hydraulic pressure; this includes air assisted airless and ultra-low-volume-air assisted technologies. Such requirement does not apply to any facility, activity or person specifically exempted by applicable subsections of County Rule 342 § 307, or to any specific system that is approved by the Administrator and the Control Officer as having a transfer efficiency consistently exceeding 64 percent.

[County Rule 342 §302.1][SIP Rule 342 §302.1]

- b) The Permittee shall not use a conventional air-atomized spray gun or other restricted use gun, except:

- (1) To apply finishing materials that have a VOC content not exceeding 1.0 pound of VOC per pound of solids (1.0 kilogram of VOC per kilogram of solids).

[County Rule 342 §302.2a] [SIP Rule 342 §302.2a]

- (2) For touch-up and repair under either of the following conditions:

- (a) Such application is performed after completion of the entire finishing operation; or

- (b) Such application is performed after applying stain and before any further coating, by equipment having a total capacity not exceeding 2.1 gallons (or 8 liters).
[County Rule 342 §302.2c] [SIP Rule 342 §302.2c]
 - (3) To apply less than five percent (5%) of all coating pursuant to County Rule 342 §307.2.e.
[County Rule 342 §302.2d] [SIP Rule 342 §302.2d]
 - c) The Permittee shall operate and maintain in proper working order all process equipment in which VOC-containing materials are used or stored.
[County Rule 342 §303][SIP Rule 342 §303]
- 6) Booth Cleaning [County Rule 342 §304.1][SIP Rule 342 §304.1]
 - a) The Permittee shall not clean spray booth components using a solvent containing more than 8.0 percent by weight of VOCs, including water and non-precursor compounds, except for: conveyors, continuous coaters and their enclosures, and metal filters.
 - b) If the spray booth coating is being replaced, the Permittee shall use no more than 1.0 gallon (3.8 liters) VOC- solvent to clean the booth.
- 7) Cleaning Guns and Lines [County Rule 342 §304.2][SIP Rule 342 §304.2]

The Permittee shall collect all solvent used to clean spray guns and shall pump or drain all solvent used for line cleaning into non-leaking container(s). Such containers shall be immediately closed or covered after all the solvent has been collected, and shall remain so except when in use.
- 8) Handling and Disposal of VOC [County Rule 342 §305] [SIP Rule 342 §305]
 - a) The Permittee shall cover and keep covered each VOC-containing material intended for the day's production, which is not currently in use. The Permittee shall store finishing and cleaning materials in closed containers.
 - b) The Permittee also shall store all VOC-containing materials, including but not limited to rags, waste coatings, waste solvents and their residues, in closed containers which are legibly labeled with their contents and which remain covered when not in use.
- 9) Exemptions from VOC Requirements for Coating Wood Furniture and Fixtures
[County Rule 342 §§307 and 403][SIP Rule 342 §§307 and 403]
 - a) Total Exemption:
The following materials are exempt from the requirements of this Permit which are based on County Rule 342: adhesives, architectural coatings, printing ink, and coatings not applied on or over a wood-product substrate.
 - b) Partial Exemptions:
 - (1) Coatings in aerosol spray cans not exceeding 22 fl. oz. (0.66 liter) capacity used exclusively for touch-up and/or repairs are exempt from all requirements of Section 300 of County Rule 342 and the conditions of this permit that are based upon those requirements.
 - (2) The following shall be exempt from the requirements of County Rule 342

§§301 and 302 and the conditions of this permit that are based upon those requirements:

- (a) Prepackaged aerosol spray cans which are not used for touch-up or repair, metal leaf finishes, and faux finishes do not have limits on VOC content when the annual total use of all such coating types together is less than 250 gallons (948 liters).
- (b) Any refinishing operation necessary for preservation, to return the furniture or fixture to original condition, to replace missing furniture to produce a matching set, or to produce custom replica furniture.
- (3) The coating for a single resin-layer finish which does not exceed a VOC limit of 3 pounds of VOC per pound of solids for completed finishes up to 3 dry mils thickness or does not exceed 2.3 pounds of VOC per pound of solids for finishes over 3 dry mils is exempt from the requirements of County Rule 342 §301.1 and the conditions of this Permit that are based upon those requirements if all of the following conditions are met:
 - (a) The containers are clearly marked: "FOR USE IN SINGLE RESIN-LAYER FINISH,"
 - (b) Facility records clearly identify this material: "DOES NOT MEET THE VOC LIMITS OF SECTION 301, RULE 342 - FOR USE ONLY IN SINGLE RESIN-LAYER FINISHES," and
 - (c) The booth used to apply a single resin-layer finish above 2.3 pounds of VOC per pound of solids is dedicated to that operation only, and is clearly labeled: "FOR SINGLE RESIN-LAYER FINISHES ONLY."
- (4) In addition to the uses of restricted-use guns allowed under County Rule 342 §302.2 and the conditions of this permit based upon that requirement, the Permittee may use a conventional air atomized or other restricted use gun to apply coatings exceeding 1 lb VOC/lb if all the following conditions are met:
 - (a) The volume of such coating applied in this way is less than five percent (5%) of the total volume of coating applied at the facility;
 - (b) Each gun has a red tag when spraying materials exceeding 1.0 pound of VOC per pound of solids. The red tag shall be a red 4 square-inch vivid, durable tag, sticker, or painted emblem/label visible on the gun or within 3 feet of the gun on the gun's hose;
 - (c) A log shall be kept of the amount of coating used by each such gun pursuant to the Recordkeeping Requirements of these Permit Conditions.

F. Operational Requirements for Water Curtains

- 1) The Permittee shall operate and maintain the water curtain control device so that it has a flow of water covering the entire width and height of the spray booth exhaust and the depth of the water is uniform across the entire width of the paint booth exhaust.

[County Rule 200 §309][Locally enforceable only]
- 2) The Permittee shall operate the spray booth with proper interlocks to ensure that the spray guns and conveyor system shall not operate unless the spray booth's water pump is operating.

[County Rule 200 §309][Locally enforceable only]

G. Operational Requirements of the Hanging Line and Associated Woodworking Equipment

- 1) The Permittee shall not add additional woodworking to the existing baghouse after the required performance test has been completed unless the Permittee follows all the appropriate permitting procedure requirements for each change
- 2) The Permittee shall not add additional woodworking to the newly installed baghouse after the required performance test has been completed unless the Permittee follows all the appropriate permitting procedure requirements for each change

[County Rule 210 §302.1b]

20. MONITORING AND RECORDKEEPING REQUIREMENTS

A. Facility-Wide Requirements [County Rule 210 §302.1c]

- 1) The Permittee shall monitor for compliance with the facility-wide VOC emissions limits of these Permit Conditions by monthly calculating and recording the daily and the rolling 12 month emissions of VOCs. The calculations shall be made no later than the end of the following month, unless a different timeframe is specified elsewhere in these permit conditions. All VOCs in the materials used in the woodworking operations are assumed to be emitted into the atmosphere unless records acceptable to the Control Officer are kept documenting the quantity and VOC content of VOC containing materials disposed of off site. The Permittee shall maintain specification sheets or technical data sheets supplied by the manufacturer specifying the VOC content of all VOC containing materials used in the woodworking process. The 12 month rolling emissions total shall be calculated by summing the emissions for the most recent complete 12 calendar months. The rolling 12 month total and daily emissions of VOCs from the facility shall be calculated based upon one of the following methods.

a) Rolling Twelve Month Total VOC Emissions Limits

- (1) Upon initial issuance of this permit and anytime thereafter that the 12 month rolling total of VOC emissions from the facility is less than or equal to 147 tons; the Permittee shall calculate the facility's VOC emissions based upon actual material usage for each month. The Permittee shall keep on site the usage records showing the volume of all VOC containing materials consumed each month. The monthly calculation of the 12 month rolling total emissions of VOCs under this scenario shall be completed by the end of the following month.
- (2) At anytime if the 12 month rolling total of VOC emissions from the facility exceeds 147 tons; the Permittee shall calculate the facility's VOC emissions based upon actual material usage for each week. This calculation shall be performed before the end of the following week. The Permittee shall keep on site the usage records showing the volume of all VOC containing materials consumed on a weekly basis. The monthly calculation of the 12 month rolling total emissions of VOCs under this scenario shall be completed by the 10th of the following month.

b) Daily VOC Emission Limits

The Permittee shall calculate the facility's daily VOC emissions based upon actual material VOC usage for each month. The Permittee shall total the monthly VOC emissions as specified in Permit Condition **20.A)1)a)** and divide the calculated monthly VOC emissions by the number of days the manufacturing facility operated for that month. The result of this calculation will be the calculated daily emission

rate. The calculation of the daily emissions of VOCs shall be completed by the end of the following month.

- 2) Opacity Readings
 - a) Opacity shall be determined by observations of visible emissions conducted in accordance with 40 CFR Part 60 Appendix A, Method 9.
[40 CFR 60.11.b][County Rule 300 §501]
 - b) Opacity of visible emissions from intermittent sources as defined by County Rule 300 §201 shall be determined by observations conducted in accordance with 40 CFR Part 60 Appendix A, Method 9, except that at least 12 rather than 24 consecutive readings shall be required at 15-second intervals for the averaging time.
[County Rule 300 §502][Locally enforceable only]
- 3) The Permittee shall monitor the total emissions of hazardous air pollutants, (HAPs), emissions by monthly calculating and recording the monthly and the rolling 12 month emissions of HAPs for all individual HAP and total HAP emissions. The calculations shall be made no later than the end of the following month, unless a different timeframe is specified elsewhere in these permit conditions. All HAPs in the materials used in the woodworking operations are assumed to be emitted into the atmosphere unless records acceptable to the Control Officer are kept documenting the quantity and HAP content of HAP containing materials disposed of off site. The Permittee shall maintain specification sheets or technical data sheets supplied by the manufacturer specifying the HAP content of all HAP containing materials used in the woodworking process. The 12 month rolling emission totals shall be calculated by summing the emissions for the most recent complete 12 calendar months. The monthly and rolling 12 month total emissions of total HAP and individual HAP emissions from the facility shall be calculated based upon actual material usage for each month. The Permittee shall keep on site the usage records showing the volume of all HAP containing materials consumed each month. The emission totals shall be available on site and easily accessible.
[County Rule 210 §302.1c]
- 4) Process Rate Records:

These records shall be updated each day of operation and include at a minimum the following information: a record of the total weight of all process materials including raw materials, additives, fuels, etc., which are put into a process flow at the beginning of each batch process shall be kept on site. This shall include all materials which participate in the process and are changed in mass, form, state or in other characteristics by means of their interaction in the given process. The duration of each separate batch process shall also be recorded.

 - a) Batch process records:

Maintain a record of the total weight of all process materials including raw materials, additives, and fuels which are put into a process flow at the beginning of each batch process shall be kept. This shall include all materials which participate in the process and are changed in mass, form, state or in other characteristics by means of their interaction in the given process. The duration of each separate batch process shall also be recorded.
 - b) Continuous or semi-continuous process records:

Maintain a daily record of the weight of all process material entering into each process including raw materials, additives, fuels, the start time and the duration

of each process run. In addition to the foregoing, records shall be kept for processes which run continuously for more than 24 hours. Such records shall include the total weight of any material entering into the process over the entire duration of the process run from start up to shut down and the total elapsed time of operation.

[County Rule 311 §502.2][SIP Rule 311 §502.2]

B. Monitoring and Recordkeeping Requirements for Baghouses that Serve Woodworking Equipment

- 1) Daily visible emissions observations shall be performed for each baghouse collection system (including the emission points, hopper and dumpster) for every day that the facility operates.

[County Rules 300] [County Rule 210 §302.1c]

- 2) The Permittee shall record the following information for all visible emissions observations:

- a) The date and time the visible emissions observation was;
- b) The name of the observer;
- c) Whether or not visible emissions were present;

[County Rule 210 § 302.1d]

- 3) Should the Permittee observe any visible emissions from the material discharge portion of the system (hopper, airlock, transfer chute or dumpster), the problem must be corrected within 24 hours of observation. If the Permittee observes any visible emission from any other point of system, the Permittee shall do the following;

- a) Inspect the system for the cause of visible emissions within 24 hours of observation.
- b) Repair the system within 72 hours of observation or notify the Department why the repair could not be made within this timeframe.
- c) Conduct a leak detection test using fluorescent powder to determine if there are any remaining leaks in the system no later than 24 hours after the repair has been completed. The fluorescent powder test shall be performed according to the manufacturer's specification. These specifications shall remain on site and available for review if necessary.
- d) For each inspection, the Permittee shall record the name of the inspector, the date of the inspection, the location of the visible emissions, a description of the corrective action taken, the date and time the system was repaired, and the date and time the leak detection test was performed with its results.
- e) If the fluorescent powder is detected in the clean air plenum, the Permittee shall repeat the steps outlined in permit condition 20.B.3)

[County Rule 200 § 309]

- 4) If visible emissions are observed from the system and the problem isn't corrected within 72 hours of observation, the Department shall require the Permittee to submit a Corrective Action Plan (CAP).

[County Rule 200 § 309]

- 5) The Control Officer may require that the CAP contain one or more of the following elements:

- a) Improved preventive maintenance practices.
- b) Regularly scheduled leak detection tests.

- c) Improved baghouse operating practices.
- d) Process operation changes.
- e) Other actions appropriate to improve baghouse performance.
- f) Schedule for CAP implementation including periodic progress reports.

[County Rule 200 § 309]

- 6) Daily pressure differential readings shall be performed and recorded for each baghouse every day that the facility operates. The most recently approved O&M Plan requires the baghouse pressure differential to be between 0.4 to 6.0 inches of water. The Permittee shall log all pressure differential readings, including the date when the reading was taken, identify each baghouse, name or initials of the person who took the reading, and any other related information. The Permittee shall investigate the cause of any reading outside the range of 0.4 to 6.0 inches of water immediately to identify, correct or repair the problem and record in a log book the cause of the problem and the corrective action initiated to remedy the abnormal pressure differential reading.

[County Rule 311 §305]

- 7) If the frequency of measurement of a pressure differential outside the applicable pressure differential range of 0.4 to 6.0 inches of water or other information indicate that the baghouse is not being operated in accordance with the O&M plan most recently approved by the Control Officer, the Department may require the Permittee to submit a Corrective Action Plan (CAP).

[County Rule 200 § 309]

- 8) The Permittee shall submit within three months of the permit's issue date, recordkeeping data of the differential pressure readings from each baghouse to document differential pressure during normal operation of the baghouses. Records submitted shall be from the previous two-year period. The Permittee shall submit at a minimum, ten separate calendar day records for each baghouse. Other material such as manufacturers' specifications shall be submitted if available.

[County Rule 200 § 309]

C. Monitoring and Recordkeeping Requirements for Spray Coating

[County Rule 210 §§302.1d and 302.1e][County Rule 315]

- 1) Should the Permittee operate any spray coating equipment inside an enclosure that is located outside of a building, the Permittee shall weekly observe spraying activity occurring in such enclosures to ensure the following:
 - a) No spraying is conducted within three feet of any open end, or within two feet of any open top of the enclosure; and
 - b) The spray is directed in a horizontal or downward pointing manner for three-sided enclosures, or away from any opening for complete enclosures and three-sided enclosures with roofs.The Permittee shall log the results of the inspections, including the name of the person conducting the inspection, the date of the inspection, and any action taken to correct incorrect application, if applicable.
- 2) If a spray booth is equipped with a dry filter system, the Permittee shall inspect each filter installed on a spray booth or enclosure, for gaps, sags or holes each day of operation.
 - a) Should the Permittee observe any gaps, sags or holes in any of the filters, the Permittee shall immediately repair or replace the filter. For each inspection, the

Permittee shall record the name of the inspector, the location of filtering system containing the filter (if more than one spray booth), and the date that the filter was replaced.

- b) If no gaps, sags or holes are observed in any of the filters, the Permittee shall record the name of the inspector, the location of the filtering system containing the filter (if more than one spray booth), and the date that the filter was inspected.
- 3) The Permittee shall maintain on file and make available to the Control Officer upon request, a copy of the manufacturer's specifications verifying that the average overspray removal efficiency for the filter system and/or wet scrubber system is at least ninety-two percent (92%).
- 4) The Permittee shall inspect the facility weekly for evidence of any spraying activity that occurred outside of any enclosure required by these Permit Conditions. The Permittee shall record the results of the inspection, including the name of the person conducting the inspection and the date of the inspection.

D. Monitoring and Recordkeeping Requirements for Coating Wood Furniture and Fixtures

- 1) The Permittee shall keep the following records and lists in a consistent and complete manner and shall make them available to the Control Officer without delay during normal business hours. Each record shall be maintained for a minimum of five years.
 - a) Current List of VOC Containing Material
The Permittee shall maintain a current list of all VOC-containing material which contains the name or code of each material and its VOC content, expressed in accordance with County Rule 342 §§501.1b and 501.1c. Any qualified single resin-layer finish shall be identified as such.
 - b) Current List of Mix Ratios
The Permittee shall maintain a current list of the manufacturer's recommended mix ratio of components, including but not limited to addition of reducers and catalysts/hardeners, except when the manufacturer has no recommendations for any additions.

[County Rule 342 §501][SIP Rule 342 §501]

- 2) The Permittee shall maintain daily records indicating the amount and VOC content of each day's use of each topcoat, sealer, or booth material that exceeds applicable VOC limits contained in County Rule 342 §§301 or 304 and the conditions of this Permit based upon those requirements. The records shall be logged and totaled by the end of the following workday. VOC content shall be entered for each such material.

[County Rule 342 §501.2a][SIP Rule 342 §501.2a]

- 3) The Permittee shall maintain the following monthly records for material compliant with County Rule 342 §§301 and 304, and the conditions of this Permit based upon those requirements, and shall update such records prior to the conclusion of the following month:
 - a) For each topcoat and sealer to which reducer is added at any time after its arrival at a facility, enter the VOC content in lb VOC/lb Solids or in grams/liter (lb/gal) less water and non-precursor organic compounds.
 - b) The amount of coating, the amount of catalyst/hardener, and the amount of reducer/coating diluent used.
 - c) The quantity and type of organic solvent used each month for stripping and cleaning.
 - d) The quantity of organic solvent disposed of offsite during the month just ended.

- e) Exception: The Permittee shall update yearly the totals of usage of each VOC-containing material known to be used in quantities less than 15 gallons (or 57 liters) per year.

[County Rule 342 §501.2b][SIP Rule 342 §501.2b]

- 4) The Permittee shall not be required to maintain records of the VOC content of any mixture of any coatings regulated by County Rule 342 as long as no individual coating in the mixture exceeds the VOC limits for coatings in Table 342-1. If any diluent, as defined in County Rule 342 §211, is mixed with a coating regulated by Table 342-1, and the diluent has a VOC content in excess of the maximum VOC content of the coating allowed by Table 342-1, records of the mixture shall be kept according to County Rule 342 §501.2b.

[County Rule 210 §302.1c]

- 5) The Permittee shall keep records on the use of conventional air-atomized spray equipment and other restricted-use guns associated with County Rule 342 §302 and the conditions of this Permit based on those requirements. The records shall be kept according to the following:

- a) A log shall be kept of the amount of coating exceeding 1 pound of VOC per pound of solid used by each conventional air-atomized or other restricted use gun. This log shall be updated daily or each time coating is added to the gun's coating reservoir.

[County Rule 342 §307.2e(3)][SIP Rule 342 §307.2e(3)]

- b) Records shall show for each semi-annual period the total volume (VR) of coatings used during that semi-annual period exceeding 1.0 pound of VOC per pound of solids (or 1.0 kilogram of VOC per kilogram of solids) applied with conventional air-atomized spray equipment and other restricted-use guns.

[County Rule 342 §501.2c][SIP Rule 342 §501.2c]

- c) Records shall show for each semi-annual period the total volume of all finishing materials (AMV) used throughout the facility.

[County Rule 342 §501.2c][SIP Rule 342 §501.2c]

- d) The total volume (VR) so applied over the previous six months shall be divided by the total of all coatings used in the same period (AMV) and these calculations and the result shall be entered in the log.

[County Rule 342 §501.2c][SIP Rule 342 §501.2c]

- 6) The Permittee shall maintain records of disposal/recovery of all VOC containing materials.

[County Rule 342 §501.3][SIP Rule 342 §501.3]

E. Monitoring and Recordkeeping Requirements for Water Curtains

- 1) The Permittee shall inspect each water curtain during each day that it is operated to ensure that the flow of water covers the entire width and height of the spray booth exhaust and depth of the water spray is uniform across the entire width of the paint booth exhaust.
- 2) Operator logs shall be kept daily which document proper spray booth water curtain function including the following:

- a) Water curtain identification number
- b) The date and time the daily water curtain inspection was taken.
- c) The name of the person performing the inspection.
- d) Whether or not the water curtain water flow covers the width and height of the spray booth exhaust and the depth of the water spray is uniform across the depth of the entire width of the paint spray booth.
- e) A description of any deviation from manufacturers' specifications or Department approved O&M plan.
- f) A description of any corrective action taken, including the date of any corrective actions, if applicable.

[County Rule 200, §309][Locally enforceable only]

F. Gaseous and Odorous Air Contaminants

The Permittee shall maintain a log of complaints of odors detected off-site. The log shall contain a description of the complaint, date and time that the complaint was received, and if given, name and/or phone number of the complainant. The logbook shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective actions that were taken.

[County Rule 210 §302.1.c]

G. Monitoring and Recordkeeping Requirements for Installation of the New Hanging Line and Associated Woodworking Equipment

- 1) The Permittee shall record in a logbook the equipment changes that occurred at the facility. The logbook must be updated by the end of the week in which any equipment was removed, added or modified.

[County Rule 210 §302.1.d] [Locally enforceable only]

- 2) The logbook shall include the following;
 - a) Date of the commencement of the change;
 - b) Date of the completion of change;
 - c) New equipment added including equipment description, manufacturer, serial number, model, rating (i.e. hp), and control vented to;
 - d) Existing equipment removed including equipment description, manufacturer, serial number, model, rating (i.e. hp) and control vented to;
 - e) Schedule of testing for the existing baghouse at the facility;
 - f) Schedule for installation of new baghouse, if applicable;
 - g) Schedule of testing for new baghouse, if applicable;

[County Rule 210 §302.1.e.(1)] [Locally enforceable only]

21. REPORTING REQUIREMENTS

NOTE: Additional reporting requirements are located in other sections of these Permit Conditions such as the general conditions and in each section of the Specific Conditions for Potential Support Activities.

Semi-Annual Monitoring Report

The Permittee shall file semiannual monitoring reports with the Control Officer, Attn: Large Source Compliance Supervisor. The initial reporting period shall begin on the permit issuance date and shall cover a period of 6 months or less. The second and subsequent reporting periods shall be in 6 month intervals after the end of the initial reporting period. The semiannual monitoring reports shall be filed by the end of the month following the reporting period. Each semiannual monitoring

report shall also contain the following information at a minimum for the applicable reporting period:

[County Rule 210 §302.1 e (1)]

- A. Emissions Calculations [County Rule 210 §302.1e]
The Permittee shall include the results of the monthly and the rolling 12-month emissions calculations for each month in the six-month reporting period.
- B. Deviation Reporting [County Rule 210 §302.1e(1)]
The Permittee shall identify all instances of deviations from these permit conditions. The Permittee shall include the probable cause of such deviations, and any corrective actions or preventive measures taken.
- C. Visible Emissions [County Rule 210 §302.1e][County Rule 311]
If visible emissions were observed during the reporting period:
- 1) Dates on which visible emissions or Method 9 readings were performed;
 - 2) Name of the observer;
 - 3) Whether or not visible emissions were present;
 - 4) The opacity of visible emissions determined by a Method 9 opacity reading, if applicable;
 - 5) A description of any corrective actions taken, including the date such action was taken;
 - 6) The name of individual certified as a visible emissions evaluator, the date of last certification, and company/agency providing the certification; and
 - 7) Any other related information.
- D. Spray Coating [County Rule 210 §302.1e][County Rule 315]
- 1) If the Permittee operates all spray coating equipment, (not including the exempted situations according to County Rule 315, Section 302), outside of a building and inside an enclosure without fixed air exhaust, the Permittee shall provide, if the facility was in compliance, a statement certifying the following:
 - a) That the enclosure has at least three sides that are a minimum of eight feet in height;
 - b) That no spraying was conducted within three feet of any open end, or within two feet of any open top of the enclosure; and
 - c) That the spray is directed in a horizontal or downward pointing manner for three-sided enclosures, or away from any opening for complete enclosures and three-sided enclosures with roofs.
 - 2) The Permittee shall provide a statement certifying that, if the facility was in compliance, that no spraying occurred outside of the paint booths and outside of a building.
 - 3) For spray coating equipment with a filtering system on a spray booth or enclosure with forced air exhaust, the Permittee shall provide, if the facility was in compliance, a statement certifying the following:
 - a) That each filter installed on a spray booth or enclosure was inspected for gaps, sags or holes for each day of use;
 - b) That all filters that were observed to have gaps, sags or holes were immediately replaced; and
 - c) Details of the make and manufacturer of each filter used as well as its overspray control efficiency.
 - 4) If the Permittee operates spray coating equipment with a water curtain system on a spray booth or enclosure with forced air exhaust, the Permittee shall provide, if the

facility was in compliance, a statement certifying the following:

- a) That each water wash spray booth or enclosure was inspected for a uniform water curtain distribution across the entire surface of the booth face for each day of use;
 - b) That any non-uniform distribution was immediately investigated and, if adjustments or repairs were necessary to return to normal operation, that the adjusted or repaired were made as soon as possible.
- 5) If the Permittee cannot provide positive certifications to any of the subsections of this Permit Condition, then the Permittee shall identify the situation(s) that prevents the positive certification and any corrective actions taken to prevent a reoccurrence.
[County Rule 201 §302.1e] [Locally enforceable only][County Rule 210 §302.1e]

E. Coating Wood Furniture and Fixtures [County Rule 210 §302.1e][County Rule 342]

- 1) A list of coatings regulated by County Rule 342 that were used at the facility during the six month period, along with the VOC content of each coating.
- 2) If any conventional air-atomized or other restricted use guns were used during the six month period, a description of the exemption that applies to the use of such guns and justification for the exemption.

F. Odor Log

The Permittee shall include a copy of the portion of the odor log which covers the applicable 6-month reporting period in each of the semiannual compliance reports. If no complaints were received during the reporting period, a statement to that effect may be substituted for the copy of the odor log.

G. Reporting Requirements for Installation of the New Hanging Line and Associated Woodworking Equipment

- 1) The Permittee shall submit monthly summary reports when changes have been made to the woodworking equipment at the facility. These reports shall be submitted no later than the last day of the month following the month in which changes occurred. If there have not been changes performed at the facility during the entire month, a summary report is not required to be submitted for that month.

[County Rule 210 §302.1.e.(1)] [Locally enforceable only]

- 2) The Permittee shall include in the monthly summary reports the following;
 - a) Date of the commencement of the change;
 - b) Date of the completion of change;
 - c) New equipment added including equipment description, manufacturer, serial number, model, rating (i.e. hp), and control vented to;
 - d) Existing equipment removed including equipment description, manufacturer, serial number, model, rating (i.e. hp) and control vented to;
 - e) Schedule of testing for the existing baghouse at the facility;
 - f) Schedule for installation of new baghouse, if applicable;
 - g) Schedule of testing for new baghouse, if applicable;
 - h) Notification of initial start up of baghouse shall be submitted to the Control Officer within 10 days of the initial startup.
 - i) Notification of the baghouse ability to operate at maximum production rate on a sustained basis to be submitted to the Control Officer within 10 days of the baghouse ability to operate at maximum production rate.

- j) Notification of the woodworking equipments connected to the existing baghouse ability to operate at maximum production rate on a sustained basis to be submitted to the Control Officer within 10 days of the equipment's ability to operate at maximum production rate.
[County Rule 210 §302.1.e.(1)] [Locally enforceable only]

22. TESTING REQUIREMENTS

A. Testing Requirements:

- 1) The Permittee shall conduct a performance test on the existing baghouse system (#42, 43 and 104 in appendix A) following the installation of additional equipment specified in the initial project on the equipment list in Appendix C. The test shall occur within 60 days after the new equipment has achieved the capability to operate at its maximum production rate on a sustained basis but no later than 180 days after initial start-up of the new equipment.
[County Rule 270 §401][SIP Rule 27 §A][40 CFR §60.8(a)]
- 2) The Permittee shall conduct a performance test on the newly installed baghouse following the installation of additional equipment specified in the equipment list in Appendix C. The performance test shall occur within 60 days after the new equipment has achieved the capability to operate at its maximum production rate on a sustained basis but no later than 180 days after the initial start up of the newly installed baghouse. The initial startup of the baghouse will be the date construction of the baghouse is completed.
[County Rule 270 §401][SIP Rule 27 §A][40 CFR §60.8(a)]
- 3) Baghouse:
The Permittee shall measure the PM concentration in the exhaust stream of the baghouse to demonstrate compliance with all applicable emission limits of these permit conditions.
[County Rule 311 §301][SIP Rule 311 §301]

- B. Testing Criteria: Performance tests shall be conducted and data reduced in accordance with the test methods and procedures specified unless the Control Officer and Administrator specifies or approves minor changes in methodology to a reference method, approves the use of an equivalent test method, approves the use of an alternative method that has been determined to be acceptable for demonstrating compliance, or waives the requirement for performance tests because the Permittee has demonstrated by other means that the source is in compliance with the standard. For NSPS facilities, only EPA has the authority to waive initial testing requirements.
[County Rule 270 §402][SIP Rule 27 §B][40 CFR §60.8(b)]

C. Test Methods:

- 1) Sampling sites and velocity traverse points shall be selected in accordance with EPA Test Method 1 or 1A. The gas volumetric flow rate shall be measured in accordance with EPA Test Method 2, 2A, 2C, 2D, 2F, 2G or 19. The dry molecular weight shall be determined in accordance with EPA Test Method 3, 3A or 3B. The stack gas moisture shall be determined in accordance with EPA Test Method 4. These methods must be performed, as applicable, during each test run.
[County Rule 270 §301.1][SIP Rule 27 §B]

- 2) Baghouse: PM testing shall be conducted in accordance with EPA Test Method 5.
- D. Operating Conditions: Performance tests shall be conducted under representative operating conditions and all equipment shall be operated during testing in accordance with the most recently submitted O&M Plan or according to its operations manual if no O&M Plan is required. The Permittee shall make available to the Control Officer any records necessary to determine appropriate conditions for performance tests. Operations during periods of startup, shutdown, and equipment malfunction shall not constitute representative conditions for performance tests unless otherwise specified in the applicable standard or permit conditions.
[County Rule 270 §403][40 CFR §60.8(c)]
- E. Monitoring Requirements:
- 1) The Permittee shall record all process and control equipment information that are necessary to document operating conditions during the test and explain why the conditions represent normal operation. Operational parameters shall be monitored and recorded at least once every 30 minutes during each of the required test runs and documented in the test report. The operational parameters monitored shall be capable of indicating that the equipment is operating within the permitted limits, both during and after the performance tests.
[County Rule 270 §301.1][SIP Rule 27 §B]
- 2) Baghouse(s): The Permittee shall record the material input and baghouse pressure drop during the performance test. This and any additional operational parameters shall be identified in the test protocol and recorded during testing.
[County Rule 311 §301][SIP Rule 311 §301]
- F. Test Protocol Submittal: The Permittee shall submit a separate test protocol for each performance test to the Department for review and approval at least 30 days prior to each performance test. The test protocol shall be prepared in accordance with the Department's "Air Quality Performance Test Guidelines for Compliance Determination in Maricopa County" dated June 17, 2005. A completed copy of the Department's "Test Protocol Submittal Form" shall accompany each test protocol.
[County Rule 270 §301.1][SIP Rule 27 §B][40 CFR §60.8(d)]
- G. Notice of Testing: The Permittee shall notify the Department in writing at least two weeks in advance of the actual date and time of each performance test so that the Department may have a representative attend.
[County Rule 270 §404][40 CFR §60.8(d)]
- H. Testing Facilities Required: The Permittee shall install any and all sample ports or platforms necessary to conduct the performance tests, provide safe access to any platforms and provide the necessary utilities for testing equipment.
[County Rule 270 §405][SIP Rule 42][40 CFR §60.8(e)]
- I. Minimum Testing Requirements: Each performance test shall consist of three separate test runs with each test run being at least one hour in duration unless otherwise specified in the applicable standard or in this permit. The same test methods shall be conducted for both the inlet and outlet measurements, if applicable, which must be conducted simultaneously. Emissions rates, concentrations, grain loadings, and/or efficiencies shall be determined as the

arithmetic average of the values determined for each individual test run. Performance tests may only be stopped for good cause, which includes forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control. Termination of a performance test without good cause after the first test run has commenced shall constitute a failure of the performance test.

[County Rule 270 §406][40 CFR §60.8(f)]

- J. Test Report Submittal: The Permittee shall complete and submit a separate test report for each performance test to the Department within 30 days after the completion of testing. The test report shall be prepared in accordance with the Department's "Air Quality Performance Test Guidelines for Compliance Determination in Maricopa County" dated June 17, 2005. A completed copy of the Department's "Test Report Submittal Form" shall accompany each test report.

[County Rule 270 §301.1][SIP Rule 27 §B]

- K. Compliance with Emission Limits: Compliance with allowable emission limits and standards shall be determined by the performance tests specified in this permit. If test results do not demonstrate compliance with the requirements of these permit conditions, the Permittee shall make the necessary repairs and/or adjustments to the equipment and demonstrate compliance through retesting. This will not nullify the fact that test results did not demonstrate compliance with the requirements of the permit conditions or nullify any violations that may result from this noncompliance. In addition to compliance demonstrations, test results shall be used for annual emissions inventory purposes, if applicable.

[County Rule 270 §407]

- L. All test extension requests, test protocols, test date notifications, and test reports required by this permit shall be submitted to the Department and addressed to the attention of the Performance Test Evaluation Supervisor.

[County Rule 270 §301.1][SIP Rule 27 §B]

**23. SUBPART JJ—NATIONAL EMISSION STANDARDS FOR WOOD FURNITURE
MANUFACTURING OPERATIONS**

[40 CFR 63 Subpart JJ][County Rule 370 §302.26]

A. SUBPART JJ APPLICABLE TO PERMITTEE AT ALL TIMES;

Note: The Permit Conditions located in Permit section 22.A. pertain to the Permittee at all times and does not depend on which operating scenario for Subpart JJ that is being used for compliance.

1) Emission Limits:

- a) The VHAP content of the adhesive, excluding aerosol adhesives and excluding contact adhesives applied to nonporous substrates, shall not exceed 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied.

[40 CFR §63.802(a)(2)][County Rule 370 §302.26]

- b) The Permittee shall limit HAP emissions from strippable spray booth coatings by using coatings that contain no more than 0.8 kg VOC/kg solids (0.8 lb VOC/lb solids), as applied.

[40 CFR §63.802(a)(3)][County Rule 370 §302.26]

2) Work Practice Standards

- a) Work practice implementation plan

The Permittee shall maintain a written work practice implementation plan that defines environmentally desirable work practices for each wood furniture manufacturing operation and addresses each of the work practice standards presented in paragraphs 2) through 12) of this section. The plan shall be developed no more than 60 days after the compliance date. The written work practice implementation plan shall be available for inspection by the Control Officer or the Administrator upon request. If the Control Officer or the Administrator determines that the work practice implementation plan does not adequately address each of the topics specified in paragraphs 2) through 12) of this section or that the plan does not include sufficient mechanisms for ensuring that the work practice standards are being implemented, the Administrator may require the affected source to modify the plan. Revisions or modifications to the plan do not require a revision of the source's Title V permit.

[40 CFR §63.803(a)][County Rule 370 §302.26]

- b) Operator Training Course

The Permittee shall train all new and existing personnel, including contract personnel, who are involved in finishing, gluing, cleaning, and washoff operations, use of manufacturing equipment, or implementation of the requirements of this subpart. All new personnel, those hired after the compliance date of the standard, shall be trained upon hiring. All existing personnel, those hired before the compliance date of the standard, shall be trained within six months of the compliance date of the standard. All personnel shall be given refresher training annually. The affected source shall maintain a copy of the training program with the work practice implementation plan. The training program shall include, at a minimum, the following:

- 1) A list of all current personnel by name and job description that are required to be trained;
 - 2) An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel;
 - 3) Lesson plans for courses to be given at the initial and the annual refresher training that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup wastes; and
 - 4) A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion.
[40 CFR §63.803(b)][County Rule 370 §302.26]
- c) Inspection and Maintenance Plan
The Permittee shall prepare and maintain with the work practice implementation plan a written leak inspection and maintenance plan that specifies:
- 1) A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings, adhesives, or organic solvents;
 - 2) An inspection schedule;
 - 3) Methods for documenting the date and results of each inspection and any repairs that were made;
 - 4) The timeframe between identifying the leak and making the repair, which adheres, at a minimum, to the following schedule:
 - (a) A first attempt at repair (e.g., tightening of packing glands) shall be made no later than five calendar days after the leak is detected; and
 - (b) Final repairs shall be made within 15 calendar days after the leak is detected, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed within three months.
- [40 CFR §63.803(c)][County Rule 370 §302.26]
- d) Cleaning and washoff solvent accounting system
The Permittee shall develop an organic solvent accounting form to record:
- 1) The quantity and type of organic solvent used each month for washoff and cleaning, as defined in the 40 CFR §63.801;
 - 2) The number of pieces washed off, and the reason for the washoff; and
 - 3) The quantity of spent solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite.
[40 CFR §63.803(d)][County Rule 370 §302.26]
- e) Chemical composition of cleaning and washoff solvents
The Permittee shall not use cleaning or washoff solvents that contain any of the pollutants listed in Table 22.2 to this section, in concentrations subject to MSDS reporting as required by OSHA.
[40 CFR §63.803(e)][County Rule 370 §302.26]
- f) Spray booth cleaning
The Permittee shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors,

continuous coaters and their enclosures, or metal filters, unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the spray booth coating or other protective material used to cover the booth is being replaced, the affected source shall use no more than 1.0 gallon of organic solvent per booth to prepare the surface of the booth prior to applying the booth coating.

[40 CFR §63.803(f)][County Rule 370 §302.26]

g) Storage requirements

The Permittee shall use normally closed containers for storing finishing, gluing, cleaning, and washoff materials.

[40 CFR §63.803(g)][County Rule 370 §302.26]

h) Application equipment requirement

The Permittee shall use conventional air spray guns to apply finishing materials only under any of the following circumstances:

- 1) To apply finishing materials that have a VOC content no greater than 1.0 lb VOC/lb solids, as applied;
- 2) For touchup and repair under the following conditions:
 - (a) The touchup and repair occurs after completion of the finishing operation; or
 - (b) The touchup and repair occurs after the application of stain and before the application of any other type of finishing material, and the materials used for touchup and repair are applied from a container that has a volume of no more than 2.0 gallons.
- 3) When spray is automated, that is, the spray gun is aimed and triggered automatically, not manually;
- 4) When emissions from the finishing application station are directed to a control device;
- 5) The conventional air gun is used to apply finishing materials and the cumulative total usage of that finishing material is no more than 5.0 percent of the total gallons of finishing material used during that semiannual period; or
- 6) The conventional air gun is used to apply stain on a part for which it is technically or economically infeasible to use any other spray application technology. The affected source shall demonstrate technical or economic infeasibility by submitting to the Administrator a videotape, a technical report, or other documentation that supports the affected source's claim of technical or economic infeasibility. The following criteria shall be used, either independently or in combination, to support the affected source's claim of technical or economic infeasibility:
 - (a) The production speed is too high or the part shape is too complex for one operator to coat the part and the application station is not large enough to accommodate an additional operator; or
 - (b) The excessively large vertical spray area of the part makes it difficult to avoid sagging or runs in the stain.

[40 CFR §63.803(h)][County Rule 370 §302.26]

i) Line cleaning

The Permittee shall pump or drain all organic solvent used for line cleaning into a normally closed container.

[40 CFR §63.803(i)][County Rule 370 §302.26]

j) Gun cleaning

The Permittee shall collect all organic solvent used to clean spray guns into a normally closed container.

[40 CFR §63.803(j)][County Rule 370 §302.26]

k) Washoff operation.

The Permittee shall control emissions from washoff operations by:

- 1) Using normally closed tanks for washoff; and
- 2) Minimizing dripping by tilting or rotating the part to drain as much solvent as possible.

[40 CFR §63.803(g)][County Rule 370 §302.26]

l) Formulation assessment plan for finishing operations:

The Permittee shall prepare and maintain with the work practice implementation plan a formulation assessment plan that:

- 1) Identifies VHAP from the list presented in Table 22.1 of this section that are being used in finishing operations by the affected source;
- 2) Establishes a baseline level of usage by the affected source, for each VHAP identified in paragraph 12) a) of this section. The baseline usage level shall be the highest annual usage from 1994, 1995, or 1996, for each VHAP identified in paragraph 12) a) of this section. For formaldehyde, the baseline level of usage shall be based on the amount of free formaldehyde present in the finishing material when it is applied. For styrene, the baseline level of usage shall be an estimate of unreacted styrene, which shall be calculated by multiplying the amount of styrene monomer in the finishing material, when it is applied, by a factor of 0.16.
- 3) Tracks the annual usage of each VHAP identified in 12) a) by the affected source that is present in amounts subject to MSDS reporting as required by OSHA.
- 4) If the annual usage of the VHAP identified in paragraph 12) a) exceeds its baseline level, then the Permittee shall provide a written notification to the permitting authority that describes the amount of the increase and explains the reasons for exceedance of the baseline level. The following explanations would relieve the Permittee from further action, unless the affected source is not in compliance with any State regulations or requirements for that VHAP:
 - (a) The exceedance is no more than 15.0 percent above the baseline level;
 - (b) Usage of the VHAP is below the de minimis level presented in Table 22.1 of this section for that VHAP;
 - (c) The affected source is in compliance with its State's air toxic regulations or guidelines for the VHAP; or
 - (d) The source of the pollutant is a finishing material with a VOC content of no more than 1.0 kg VOC/kg solids (1.0 lb VOC/lb solids), as applied.
 - (e) If none of the above explanations are the reason for the increase, the Permittee shall confer with the permitting authority to discuss the reason for the increase and whether there are practical and reasonable

technology-based solutions for reducing the usage. The evaluation of whether a technology is reasonable and practical shall be based on cost, quality, and marketability of the product, whether the technology is being used successfully by other wood furniture manufacturing operations, or other criteria mutually agreed upon by the permitting authority and the Permittee. If there are no practical and reasonable solutions, the facility need take no further action. If there are solutions, the Permittee shall develop a plan to reduce usage of the pollutant to the extent feasible. The plan shall address the approach to be used to reduce emissions, a timetable for implementing the plan, and a schedule for submitting notification of progress.

- (f) If the Permittee uses a VHAP of potential concern for which a baseline level has not been previously established, then the baseline level shall be established as the de minimis level, based on 70 year exposure levels and data provided in the proposed rulemaking pursuant to Section 112(g) of the CAA, for that pollutant. A list of VHAP of potential concern is provided in Table 22.3. If usage of the VHAP of potential concern exceeds the de minimis level, then the affected source shall provide an explanation to the permitting authority that documents the reason for exceedance of the de minimis level. If the explanation is not one of those listed in the 40 CFR 63.803(l)(4), (i) through (iv), the affected source shall follow the procedures established in the 40 CFR 63.803(l)(5).

[40 CFR §63.803(l)][County Rule 370 §302.26]

**TABLE 22.1 List of VHAP of Potential Concern
Identified by Industry**

CAS No.	CHEMICAL NAME	EPA de minimus, (tons/year)
68122	Dimethyl formamide	1.0
50000	Formaldehyde	0.2
75092	Methyl chloride	4.0
79469	2-Nitropropane	1.0
78591	Isophorone	0.7
1000425	Styrene monomer	1.0
108952	Phenol	0.1
111422	Dimethanolamine	5.0
109864	2-Methoxyethanol	10.0
111159	2-Ethoxyethyl acetate	10.0

40 CFR Subpart JJ, TABLE 5

- 3) Compliance Procedures and Monitoring Requirements
 - a) The Permittee use compliant contact adhesives with a VHAP content no greater than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied.
[40 CFR §63.804(c)(1)][County Rule 370 §302.26]
 - b) Initial compliance
 - (1) The Permittee shall submit an initial compliance status report, as required by the 40 CFR §63.807(a), stating that compliant contact adhesives are being used by the source.
[40 CFR §63.804(f)(5)][County Rule 370 §302.26]
 - (2) The Permittee shall submit an initial compliance status report, as required by the 40 CFR §63.807(a), stating that compliant strippable spray booth coatings are being used by the affected source.
[40 CFR §63.804(f)(7)][County Rule 370 §302.26]
 - (3) The Permittee shall submit an initial compliance status report, as required by the 40 CFR §63.807(a), stating that the work practice implementation plan has been developed and procedures have been established for implementing the provisions of the plan.
[40 CFR §63.804(f)(8)][County Rule 370 §302.26]
 - c) Continuous Compliance Demonstrations
 - (1) The Permittee shall submit a compliance certification with the semiannual report required by the 40 CFR §63.807(b).
 - (a) The compliance certification shall state that compliant contact adhesives have been used each day in the semiannual reporting period, or should otherwise identify each day non-compliant contact adhesives were used. Each day a non-compliant contact adhesive is used is a single violation of the standard.
 - (b) The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.
[40 CFR §63.804(g)(5)][County Rule 370 §302.26]

- (2) The Permittee shall submit a compliance certification with the semiannual report required by the 40 CFR §63.807(b).
 - (a) The compliance certification shall state that compliant strippable spray booth coatings have been used each day in the semiannual reporting period, or should otherwise identify each day non-compliant materials were used. Each day a non-compliant strippable booth coating is used is a single violation of the standard.
 - (b) The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.
[40 CFR §63.804(g)(7)][County Rule 370 §302.26]
- (3) The Permittee shall submit a compliance certification with the semiannual report required by the 40 CFR §63.807(b).
 - (a) The compliance certification shall state that the work practice implementation plan is being followed, or should otherwise identify the provisions of the plan that have not been implemented and each day the provisions were not implemented. During any period of time that an Permittee is required to implement the provisions of the plan, each failure to implement an obligation under the plan during any particular day is a violation.
 - (b) The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.
[40 CFR §63.804(g)(8)][County Rule 370 §302.26]
- 4) Performance Test Methods
The EPA Method 311 of Appendix A of part 63 shall be used in conjunction with formulation data to determine the VHAP content of the liquid coating. Formulation data shall be used to identify VHAP present in the coating. The EPA Method 311 shall then be used to quantify those VHAP identified through formulation data. The EPA Method 311 shall not be used to quantify HAP such as styrene and formaldehyde that are emitted during the cure. The EPA Method 24 (40 CFR part 60, Appendix A) shall be used to determine the solids content by weight and the density of coatings. If it is demonstrated to the satisfaction of the Administrator that a coating does not release VOC or HAP byproducts during the cure, for example, all VOC and HAP present in the coating is solvent, then batch formulation information shall be accepted. The Permittee of an affected source may request approval from the Administrator to use an alternative method for determining the VHAP content of the coating. In the event of any inconsistency between the EPA Method 24 or Method 311 test data and a facility's formulation data, that is, if the EPA Method 24/311 value is higher, the EPA Method 24/311 test shall govern unless after consultation, a regulated source could demonstrate to the satisfaction of the enforcement agency that the formulation data were correct. Sampling procedures shall follow the guidelines presented in "Standard Procedures for Collection of Coating and Ink Samples for VOC Content Analysis by Reference Method 24 and Reference Method 24A," EPA- 340/1-91-010. (Docket No. A-93-10, Item No. IV-A-1).
[40 CFR §63.805(a)][County Rule 370 §302.26]
- 5) Recordkeeping Requirements
 - a) The Permittee shall fulfill all recordkeeping requirements of 40 CFR §63.10 of Subpart A, according to the applicability criteria in 40 CFR §63.800(d).
[40 CFR §63.806(a)][County Rule 370 §302.26]
 - b) The Permittee shall maintain records of the following:
 - (1) A certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating used at the facility; and
 - (2) The VHAP content, in kg VHAP/ kg solids (lb VHAP/lb solids), as applied, of each finishing material and contact adhesive used at the facility; and

- (3) The VOC content, in kg VOC/kg solids (lb VOC/lb solids), as applied, of each strippable booth coating used at the facility.
[40 CFR §63.806(b)][County Rule 370 §302.26]
 - c) The Permittee shall maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to:
 - (1) Records demonstrating that the operator training program required by the 40 CFR §63.803(b) is in place;
 - (2) Records collected in accordance with the inspection and maintenance plan required by the 40 CFR §63.803(c);
 - (3) Records associated with the cleaning solvent accounting system required by the 40 CFR §63.803(d);
 - (4) Records associated with the limitation on the use of conventional air spray guns showing total finishing material usage and the percentage of finishing materials applied with conventional air spray guns for each semiannual period as required by the 40 CFR §63.803(h)(5).
 - (5) Records associated with the formulation assessment plan required by the 40 CFR §63.803(l); and
 - (6) Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.
[40 CFR §63.806(e)][County Rule 370 §302.26]
 - d) The Permittee shall maintain records of the compliance certifications submitted in accordance with the 40 CFR §63.807(b) for each semiannual period following the compliance date.
[40 CFR §63.806(h)][County Rule 370 §302.26]
 - e) The Permittee shall maintain records of all other information submitted with the compliance status report required by 40 CFR §63.9(h) and the 40 CFR §63.807(b) and the 40 CFR §63.807 (c).
[40 CFR §63.806(i)][County Rule 370 §302.26]
 - f) The Permittee shall maintain all records in accordance with the requirements of 40 CFR §63.10(b)(1).
[40 CFR §63.806(j)][County Rule 370 §302.26]
- 5) Reporting requirements
- a) The Permittee shall fulfill all reporting requirements of 40 CFR § 63.7 through § 63.10 of subpart A (General Provisions) according to the applicability criteria in the 40 CFR §63.800(d).
[40 CFR §63.807(a)][County Rule 370 §302.26]
 - b) The Permittee shall submit the compliance status report required by § 63.9(h) of subpart A (General Provisions) no later than 60 days after the compliance date. The report shall include the information required by the 40 CFR § 63.804(f) (1), (2), (3), (5), (7) and (8).
[40 CFR §63.807(b)][County Rule 370 §302.26]
 - c) The Permittee demonstrating compliance in accordance with 40 CFR § 63.804(f) (1), (2), (3), (5), (7) and (8) shall submit a report covering the previous 6 months of wood furniture manufacturing operations:
 - (1) The first report shall be submitted 30 calendar days after the end of the first 6-month period following the compliance date.
 - (2) Subsequent reports shall be submitted 30 calendar days after the end of each 6-month period following the first report.

- (3) The semiannual reports shall include the information required by 40 CFR § 63.804(f) (1), (2), (3), (5), (7) and (8), a statement of whether the affected source was in compliance or noncompliance, and, if the affected source was in noncompliance, the measures taken to bring the affected source into compliance.
- (4) The frequency of the reports required by paragraph 3) of this section shall not be reduced from semiannually regardless of the history of the owner's or operator's compliance status.
- (5) The Permittee required to provide a written notification under the 40 CFR § 63.804(f) (1) and (4) shall include in the notification one or more statements that explain the reasons for the usage increase. The notification shall be submitted no later than 30 calendar days after the end of the annual period in which the usage increase occurred.

[40 CFR §63.807(c)][County Rule 370 §302.26]

Table 22.2 Pollutants Excluded From Use in Cleaning and Washoff Solvents:

Chemical name	CAS No.
4-Aminobiphenyl	92671
Styrene oxide	96093
Diethyl sulfate	64675
N-Nitrosomorpholine	59892
Dimethyl formamide	68122
Hexamethylphosphoramide	680319
Acetamide	60355
4,4'-Methylenedianiline	101779
o-Anisidine	90040
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746016
Beryllium salts	
Benzidine	92875
N-Nitroso-N-methylurea	684935
Bis (chloromethyl) ether	542881
Dimethyl carbamoyl chloride	79447
Chromium compounds (hexavalent)	
1,2-Propylenimine (2-Methyl aziridine)	75558
Arsenic and inorganic arsenic compounds	99999904
Hydrazine	302012
1,1-Dimethyl hydrazine	57147
Beryllium compounds	7440417
1,2-Dibromo-3-chloropropane	96128
N-Nitrosodimethylamine	62759
Cadmium compounds	
Benzo (a) pyrene	50328
Polychlorinated biphenyls (Aroclors)	1336363
Heptachlor	76448

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3,3'-Dimethyl benzidine	119937
Nickel subsulfide	12035722
Acrylamide	79061
Hexachlorobenzene	118741
Chlordane	57749
1,3-Propane sultone	1120714
1,3-Butadiene	106990
Nickel refinery dust	
2-Acetylaminoflourine	53963
3,3'-Dichlorobenzidine	53963
Lindane (hexachlorocyclohexane, gamma)	58899
2,4-Toluene diamine	95807
Dichloroethyl ether (Bis(2-chloroethyl) ether)	111444
1,2-Diphenylhydrazine	122667
Toxaphene (chlorinated camphene)	8001352
2,4-Dinitrotoluene	121142
3,3'-Dimethoxybenzidine	119904
Formaldehyde	50000
4,4'-Methylene bis (2-chloroaniline)	101144
Acrylonitrile	107131
Ethylene dibromide (1,2-Dibromoethane)	106934
DDE (1,1-p-chlorophenyl 1-2 dichloroethylene)	72559
Chlorobenzilate	510156
Dichlorvos	62737
Vinyl chloride	75014
Coke Oven Emissions	
Ethylene oxide	75218
Ethylene thiourea	96457
Vinyl bromide (bromoethene)	593602
Selenium sulfide (mono and di)	7488564
Chloroform	67663
Pentachlorophenol	87865
Ethyl carbamate (Urethane)	51796
Ethylene dichloride (1,2-Dichloroethane)	107062
Propylene dichloride (1,2-Dichloropropane)	78875
Carbon tetrachloride	56235
Benzene	71432
Methyl hydrazine	60344
Ethyl acrylate	140885

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Propylene oxide	75569
Aniline	62533
1,4-Dichlorobenzene(p)	106467
2,4,6-Trichlorophenol	88062
Bis (2-ethylhexyl) phthalate (DEHP)	117817
o-Toluidine	95534
Propoxur	114261
1,4-Dioxane (1,4-Diethyleneoxide)	123911
Acetaldehyde	75070
Bromoform	75252
Captan	133062
Epichlorohydrin	106898
Methylene chloride (Dichloromethane)	75092
Dibenz (ah) anthracene	53703
Chrysene	218019
Dimethyl aminoazobenzene	60117
Benzo (a) anthracene	56553
Benzo (b) fluoranthene	205992
Antimony trioxide	1309644
2-Nitropropane	79469
1,3-Dichloropropene	542756
7, 12-Dimethylbenz(a) anthracene	57976
Benz(c) acridine	225514
Indeno(1,2,3-cd)pyrene	193395
1,2:7,8-Dibenzopyrene	189559

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Table 22.3 VHAP OF POTENTIAL CONCERN

CAS Number	Chemical Name	EPA, de minimus (tons per year)
92671	4-Aminobiphenyl	1.0
96093	Styrene oxide	1.0
64675	Diethyl sulfate	1.0
59892	N-Nitrosomorpholine	1.0
68122	Dimethyl formamide	1.0
680319	Hexamethylphosphoramide	0.01
60355	Acetamide	1.0
101779	4,4'-Methylenedianiline	1.0
90040	o-Anisidine	1.0
1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin	0.00000006
92875	Benzidine	0.00003
684935	N-Nitroso-N-methylurea	0.00002

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542881	Bis (chloromethyl) ether	0.00003
79447	Dimethyl carbamoyl chloride	0.002
75558	1,2-Propylenimine (2-Methyl aziridine)	0.0003
57147	1,1-Dimethyl hydrazine	0.0008
96128	1,2-Dibromo-3-chloropropane	0.001
62759	N-Nitrosodimethylamine	0.001
50328	Benzo (a) pyrene	0.001
1336363	Polychlorinated biphenyls (Aroclors)	0.0009
76448	Heptachlor	0.002
119937	3,3'-Dimethyl benzidine	0.001
79061	Acrylamide	0.002
118741	Hexachlorobenzene	0.004
57749	Chlordane	0.005
1120714	1,3-Propane sultone	0.003
106990	1,3-Butadiene	0.007
53963	2-Acetylaminoflourine	0.0005
53963	3,3'-Dichlorobenzidine	0.02
58899	Lindane (hexachlorocyclohexane, gamma)	0.005
95807	2,4-Toluene diamine	0.002
111444	Dichloroethyl ether (Bis(2-chloroethyl) ether)	0.006
122667	1,2-Diphenylhydrazine	0.009
8001352	Toxaphene (chlorinated camphene)	0.006
121142	2,4-Dinitrotoluene	0.002
119904	3,3'-Dimethoxybenzidine	0.01
50000	Formaldehyde	0.2
101144	4,4'-Methylene bis (2-chloroaniline)	0.02
107131	Acrylonitrile	0.03
106934	Ethylene dibromide (1,2-Dibromoethane)	0.01
72559	DDE (1,1-p-chlorophenyl 1-2 dichloroethylene)	0.01
510156	Chlorobenzilate	0.04
62737	Dichlorvos	0.02
75014	Vinyl chloride	0.02
75218	Ethylene oxide	0.09
96457	Ethylene thiourea	0.06
593602	Vinyl bromide (bromoethene)	0.06
67663	Chloroform	0.09
87865	Pentachlorophenol	0.07
51796	Ethyl carbamate (Urethane)	0.08
107062	Ethylene dichloride (1,2-Dichloroethane)	0.08
78875	Propylene dichloride (1,2-Dichloropropane)	0.1
56235	Carbon tetrachloride	0.1
71432	Benzene	0.2
140885	Ethyl acrylate	0.1
75569	Propylene oxide	0.5
62533	Aniline	0.1

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106467	1,4-Dichlorobenzene(p)	0.3
88062	2,4,6-Trichlorophenol	0.6
117817	Bis (2-ethylhexyl) phthalate (DEHP)	0.5
95534	o-Toluidine	0.4
114261	Propoxur	2.0
79016	Trichloroethylene	1.0
123911	1,4-Dioxane (1,4-Diethyleneoxide)	0.6
75070	Acetaldehyde	0.9
75252	Bromoform	2.0
133062	Captan	2.0
106898	Epichlorohydrin	2.0
75092	Methylene chloride (Dichloromethane)	4.0
127184	Tetrachloroethylene (Perchloroethylene)	4.0
53703	Dibenz (ah) anthracene	0.01
218019	Chrysene	0.01
60117	Dimethyl aminoazobenzene	1.0
56553	Benzo (a) anthracene	0.01
205992	Benzo (b) fluoranthene	0.01
79469	2-Nitropropane	1.0
542756	1,3-Dichloropropene	1.0
57976	7,12-Dimethylbenz (a) anthracene	0.01
225514	Benz(c)acridine	0.01
193395	Indeno(1,2,3-cd)pyrene	0.01
189559	1,2:7,8-Dibenzopyrene	0.01
79345	1,1,2,2-Tetrachloroethane	0.03
91225	Quinoline	0.0006
75354	Vinylidene chloride (1,1-Dichloroethylene)	0.04
87683	Hexachlorobutadiene	0.09
82688	Pentachloronitrobenzene (Quintobenzene)	0.03
78591	Isophorone	0.7
79005	1,1,2-Trichloroethane	0.1
74873	Methyl chloride (Chloromethane)	1.0
67721	Hexachloroethane	0.5
1582098	Trifluralin	0.9
1319773	Cresols/Cresylic acid (isomers and mixture)	1.0
108394	m-Cresol	1.0
75343	Ethylidene dichloride (1,1-Dichloroethane)	1.0
95487	o-Cresol	1.0
106445	p-Cresol	1.0
74884	Methyl iodide (Iodomethane)	1.0
100425	Styrene	1.0
107051	Allyl chloride	1.0
334883	Diazomethane	1.0
95954	2,4,5--Trichlorophenol	1.0
133904	Chloramben	1.0
106887	1,2--Epoxybutane	1.0

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108054	Vinyl acetate	1.0
126998	Chloroprene	1.0
123319	Hydroquinone	1.0
92933	4-Nitrobiphenyl	1.0
56382	Parathion	0.1
13463393	Nickel Carbonyl	0.1
60344	Methyl hydrazine	0.006
151564	Ethylene imine	0.0003
77781	Dimethyl sulfate	0.1
107302	Chloromethyl methyl ether	0.1
57578	beta-Propiolactone	0.1
100447	Benzyl chloride	0.04
98077	Benzotrichloride	0.0006
107028	Acrolein	0.04
584849	2,4--Toluene diisocyanate	0.1
75741	Tetramethyl lead	0.01
78002	Tetraethyl lead	0.01
12108133	Methylcyclopentadienyl manganese	0.1
624839	Methyl isocyanate	0.1
77474	Hexachlorocyclopentadiene	0.1
62207765	Fluomine	0.1
10210681	Cobalt carbonyl	0.1
79118	Chloroacetic acid	0.1
534521	4,6-Dinitro-o-cresol, and salts	0.1
101688	Methylene diphenyl diisocyanate	0.1
108952	Phenol	0.1
62384	Mercury, (acetato-o) phenyl	0.01
98862	Acetophenone	1.0
108316	Maleic anhydride	1.0
532274	2-Chloroacetophenone	0.06
51285	2,4-Dinitrophenol	1.0
109864	2-Methoxy ethanol	10.0
98953	Nitrobenzene	1.0
74839	Methyl bromide (Bromomethane)	10.0
75150	Carbon disulfide	1.0
121697	N,N-Dimethylaniline	1.0
106514	Quinone	5.0
123386	Propionaldehyde	5.0
120809	Catechol	5.0
85449	Phthalic anhydride	5.0
463581	Carbonyl sulfide	5.0
132649	Dibenzofurans	5.0
100027	4-Nitrophenol	5.0
540841	2,2,4-Trimethylpentane	5.0
111422	Diethanolamine	5.0
822060	Hexamethylene-1,6-diisocyanate	5.0

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	Glycol ethers ¹	5.0
	Polycyclic organic matter ²	0.01

40 CFR Subpart JJ, TABLE 6

¹ Except for ethylene glycol butyl ether, ethylene glycol ethyl ether (2-ethoxy ethanol), ethylene glycol hexyl ether, ethylene glycol methyl ether (2-methoxyethanol), ethylene glycol phenyl ether, ethylene glycol propyl ether, ethylene glycol mono-2-ethylhexyl ether, diethylene glycol butyl ether, diethylene glycol ethyl ether, diethylene glycol methyl ether, diethylene glycol hexyl ether, diethylene glycol phenyl ether, diethylene glycol propyl ether, triethylene glycol butyl ether, triethylene glycol ethyl ether, triethylene glycol methyl ether, triethylene glycol propyl ether, ethylene glycol butyl ether acetate, ethylene glycol ethyl ether acetate, and diethylene glycol ethyl ether acetate.

² Except for benzo(b)fluoranthene, benzo(a)anthracene, benzo(a)pyrene, 7,12-dimethylbenz(a)anthracene, benz(c)acridine, chrysene, dibenz(ah)anthracene, 1,2:7,8-dibenzopyrene, indeno(1,2,3-cd)pyrene, but including dioxins and furans.

B. COMPLIANT COATING OPTION (alternative operating scenario)

The Control Officer has granted the Permittee the operational flexibility to use an alternative operating scenario. The Permittee must comply with either Permit Condition 22.B. **or** Permit Condition 22.C. to be in compliance with this Permit.

1) Allowable Emissions

The Permittee shall use only compliant finishing materials according to the following criteria:

- a) Each stain, sealer, and topcoat shall have a VHAP content of no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight by maintaining certified product data sheets for each coating and thinner;

To determine VHAP emissions from a finishing material containing formaldehyde or styrene, the Permittee shall use the methods presented in the 40 CFR §63.803(1)(2) for determining styrene and formaldehyde usage.

[40 CFR §63.802(a)(1)][County Rule 370 §302.26]

- b) Each washcoat, basecoat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, shall have a VHAP content of no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight by maintaining certified product data sheets for each coating and thinner;

[40 CFR §63.804(a)(1)][County Rule 370 §302.26]

- c) Each washcoat, basecoat, and enamel that is formulated at the affected source shall be formulated using a finishing material containing no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids) and a thinner containing no more than 3.0 percent VHAP by weight.

[40 CFR §63.804(a)(1)][County Rule 370 §302.26]

2) Compliance Procedures and Monitoring Requirements

- a) Use compliant finishing materials according to the following criteria:

- (1) Demonstrate that each stain, sealer, and topcoat has a VHAP content of no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight by maintaining certified product data sheets for each coating and thinner;
- (2) Demonstrate that each washcoat, basecoat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, has a VHAP content of no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight by maintaining certified product data sheets for each coating and thinner; and
- (3) Demonstrate that each washcoat, basecoat, and enamel that is formulated at the affected source is formulated using a finishing material containing no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids) and a thinner containing no more than 3.0 percent VHAP by weight.

[40 CFR §63.804(a)][County Rule 370 §302.26]

- b) Initial Compliance

The Permittee shall submit an initial compliance status report, as required by the 40 CFR Sec. 63.807(c), stating that compliant stains, washcoats, sealers,

topcoats, basecoats, enamels, and thinners, as applicable, are being used by the affected source.

[40 CFR §63.804(f)(1)][County Rule 370 §302.26]

2) Recordkeeping Requirements

a) Initial Compliance

The Permittee shall submit an initial compliance status report, as required by 40 CFR Sec. 63.807(b), stating that compliant stains, washcoats, sealers, topcoats, basecoats, enamels, and thinners, as applicable, are being used by the affected source.

[40 CFR §63.804(f)(1)][County Rule 370 §302.26]

b) Continuous Compliance

The Permittee shall demonstrate continuous compliance by using compliant coatings and thinners, maintaining records that demonstrate the coatings and thinners are compliant, and submitting a compliance certification with the semiannual report.

- (1) The compliance certification shall state that compliant stains, washcoats, sealers, topcoats, basecoats, enamels, and thinners, as applicable, have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance. An affected source is in violation of the standard whenever a noncompliant coating, as demonstrated by records or by a sample of the coating, is used.

[40 CFR §63.802(g)][County Rule 370 §302.26]

- (2) The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.

[40 CFR §63.802(g)][County Rule 370 §302.26]

C. AVERAGING OPTION (alternative operating scenario)

The Control Officer has granted the Permittee the operational flexibility to use an alternative operating scenario. The Permittee must comply with either Permit Condition 22.B. **or** Permit Condition 22.C. to be in compliance with this Permit.

1) Allowable Emissions

- a) The Permittee shall limit VHAP emissions from finishing operations by achieving a weighted average VHAP content across all coatings (maximum kg VHAP/kg solids) of no greater than 1.0

To determine VHAP emissions from a finishing material containing formaldehyde or styrene, the Permittee shall use the methods presented in the 40 CFR §63.803(l)(2) for determining styrene and formaldehyde usage.

[40 CFR §63.802(a)(1)][County Rule 370 §302.26]

2) Compliance Procedures and Monitoring Requirements

- a) The Permittee calculate the average VHAP content for all finishing materials used at the facility using Equation 1, and maintain a value of E that is no greater than 1.0;

[40 CFR §63.804(a)(1)][County Rule 370 §302.26]

Equation 1

$$E = (Mc1Cc1 + Mc2Cc2 + * * * + Mcn Ccn + S1W1 + S2W2 + * * * SnWn) / (Mc1 + Mc2 + * * * + Mcn)$$

b) Definitions:

- Cc = the VHAP content of a finishing material (c), in kilograms of volatile hazardous air pollutants per kilogram of coating solids (kg VHAP/kg solids), as supplied. Also given in pounds of volatile hazardous air pollutants per pound of coating solids (lb VHAP/lb solids).
- E = the emission limit achieved by an emission point or a set of emission points, in kg VHAP/kg solids, (lb VHAP/ lb solids).
- Mc = the mass of solids in finishing material used monthly, kg solids/month (lb solids/month).
- S = the VHAP content of a solvent, expressed as a weight fraction, added to finishing materials.
- W = the amount of solvent, in kilograms (pounds), added to finishing materials during the monthly averaging period.

[40 CFR §63.801(a)][County Rule 370 §302.26]

3) Recordkeeping Requirements

a) Initial compliance

The Permittee shall submit the results of the averaging calculation (Equation 1) for the first month with the initial compliance status report required by the .

The first month's calculation shall include data for the entire month in which the compliance date falls. For example, if the source's compliance date is November 21, 1997, the averaging calculation shall include data from November 1, 1997 to November 30, 1997.

[40 CFR §63.804(f)(1)][County Rule 370 §302.26]

b) Continuous Compliance Demonstrations

The Permittee shall demonstrate continuous compliance by submitting the results of the averaging calculation (Equation 1) for each month within that semiannual period and submitting a compliance certification with the semiannual report required by the 40 CFR §63.807(c)].

- (1) The compliance certification shall state that the value of (E), as calculated by Equation 1, is no greater than 1.0. The Permittee is in violation of the standard if E is greater than 1.0 for any month. A violation of the monthly average is a separate violation of the standard for each day of operation during the month, unless the source can demonstrate through records that the violation of the monthly average can be attributed to a particular day or days during the period.

- (2) The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.

[40 CFR §63.804(g)(1)][County Rule 370 §302.26]

- (3) The Permittee shall maintain copies of the averaging calculation for each month following the compliance date, as well as the data on the quantity of coatings and thinners used that is necessary to support the calculation of E in Equation 1.

[40 CFR §63.806(c)][County Rule 370 §302.26]

SPECIFIC CONDITIONS FOR POTENTIAL SUPPORT ACTIVITIES

24. ABRASIVE BLASTING

A. OPERATIONAL LIMITATIONS

- 1) Confined Blasting [County Rule 312 §301&304] [locally enforceable only]
All abrasive blasting operations shall be performed in a confined enclosure consisting of 3 or 4 sides and a roof or cover, unless one of the following conditions are met, in which case unconfined blasting may be performed if it is conducted in accordance with the unconfined blasting section of these Permit Conditions..
 - a) The item to be blasted exceeds 8 ft. in any one dimension, or
 - b) The surface being blasted is fixed in a permanent location, cannot easily be moved into a confined enclosure, and the surface is not normally dismantled or moved prior to abrasive blasting.

The Permittee shall not use forced air exhaust in an abrasive blasting enclosure unless a certified blasting media is used.

- 2) Unconfined Blasting [County Rule 312 §301] [SIP Rule 312 §302.4]
If the Permittee performs unconfined blasting, then at least one of the following control measures shall be used:
 - a) Wet abrasive blasting,
 - b) Vacuum blasting, or
 - c) Dry abrasive blasting, provided that all of the following conditions are met:
 - (1) Perform only on a metal substrate.
 - (2) Use only certified abrasive for dry unconfined blasting.
 - (3) Blast only paint that is lead free (i.e. the lead content is less than 0.1percent).
 - (4) Perform the abrasive blasting operation directed away from unpaved surfaces.
 - (5) Use the certified abrasive not more than once unless contaminants are separated from the abrasive through filtration and the abrasive conforms to its original size.
- 3) Controls Required [SIP Rule 312 §302]
Any abrasive blasting operation shall use at least one of the following controls:
 - a) Confined blasting
 - b) Wet abrasive blasting
 - c) Hydroblasting
 - d) A control measure that is determined by the Control Officer to be equally effective to control particulate emissions.
- 4) Opacity Limitation
The Permittee shall not discharge into the atmosphere from any abrasive blasting operation any air contaminant for an observation period or periods aggregating more than three minutes in any sixty minute period an opacity equal to or greater than 20 percent.

[County Rule 312 §305] [SIP Rule 312 §301]

An indicated excess will be considered to have occurred if any cumulative period of 15-second increments totaling more than three minutes within any sixty minute period was in excess of the opacity standard.

[County Rule 312 §305] [locally enforceable only]

- 5) Wind Event [County Rule 312 §306] [SIP Rule 312 §302.4]
The Permittee shall not conduct unconfined abrasive blasting when the 60-minute average wind speed is greater than 25 miles per hour.

- 6) Traffic Markers [County Rule 312 §307] [SIP Rule 312 302.4]
Surface preparation for raised traffic delineating markers and pavement marking removal using abrasive blasting operations shall be performed by wet blasting, hydroblasting or vacuum blasting. Dry blasting may be performed using only certified abrasives when:
- a) Removing pavement markings of less than 1,000 square feet
 - b) Performing surface preparation for raised traffic delineating markers of less than 1,000 square feet.

- 7) Work Practices
- a) Unconfined Blasting: The Permittee shall clean up spent abrasive material with a potential to be transported during a wind event and, until removal occurs, shall, at a minimum, meet the provisions of Rule 310 of these rules regarding work practices.

[County Rule 312 §308] [SIP Rule 312 §302.4]

- b) Confined Blasting: At the end of the work shift the Permittee shall clean up spillage, carry-out, and/or trackout of any spent abrasive material with a potential to be transported during a wind event.

[County Rule 312 §308] [locally enforceable only]

- B. MONITORING/RECORDKEEPING [County Rule 312 §501] [County Rule 210 §302.1c]
At a minimum, the Permittee shall keep the following records onsite, that are applicable to all abrasive blasting operations.

- 1) The date the blasting occurs,
- 2) The blasting equipment that is operating,
- 3) A description of the type of blasting.
- 4) The type and amount of solid abrasive material consumed on a monthly basis. Include name of certified abrasive used, as applicable.
- 5) Material Safety Data Sheets (MSDS) or results of any lead testing that was performed on paint that is to be removed via unconfined blasting, as applicable.

- C. REPORTING [County Rule 210 § 302.1.e.(1)]

The Permittee shall include the following information in the semiannual compliance report:

- 1) Whether abrasive blasting occurred during the reporting period,
- 2) Whether the blasting was confined or unconfined, and
- 3) If the blasting was unconfined, the control measure used to meet the requirements of these permit conditions.

25. ARCHITECTURAL COATING

A. OPERATIONAL LIMITATIONS AND STANDARDS

The Permittee shall limit the volatile organic compound (VOC) content of architectural coatings as follows:

- 1) Pavement Sealer: [County Rule 335 §301][SIP Rule 335 §301]

The Permittee shall not apply any architectural coating manufactured after July 13, 1988, which is recommended for use as a bituminous pavement sealer unless it is an emulsion type coating.

- 2) Non-Flat Architectural Coating: [County Rule 335 §303][SIP Rule 335 §303]
The Permittee shall not apply any non-flat architectural coating manufactured after July 13, 1990, which contains more than 2.1 lbs (250 g/l) of volatile organic compounds per gallon of coating, excluding water and any colorant added to tint bases. These limits do not apply to specialty coatings listed below.
- 3) Flat Architectural Coating: [County Rule 335 §304][SIP Rule 335 §304]
The Permittee shall not apply any flat architectural coating manufactured after July 13, 1989, which contains more than 2.1 lbs (250 g/l) of volatile organic compounds per gallon of coating, excluding water and any colorant added to tint bases. These limits do not apply to specialty coatings listed below.
- 4) Specialty Coatings: [County Rule 335 §305][SIP Rule 335 §305]
The Permittee shall not apply any architectural coating manufactured after July 13, 1991 that exceeds the following limits. The limits are expressed in pounds of VOC per gallon of coating as applied, excluding water and any colorant added to tint bases.

COATING

<u>(lb./gal)</u>	
	Concrete Curing Compounds 2.9
	Dry Fog Coating
	Flat 3.5
	Non-flat 3.3
	Enamel Undercoaters 2.9
	General Primers, Sealers and Undercoaters 2.9
	Industrial Maintenance Primers and Topcoats
	Alkyds 3.5
	Catalyzed Epoxy 3.5
	Bituminous Coating Materials 3.5
	Inorganic Polymers 3.5
	Vinyl Chloride Polymers 3.5
	Chlorinated Rubbers 3.5
	Acrylic Polymers 3.5
	Urethane Polymers 3.5
	Silicones 3.5
	Unique Vehicles 3.5
	Lacquers 5.7
	Opaque Stains 2.9
	Wood Preservatives 2.9
	Quick Dry Enamels 3.3
	Roof Coatings
	2.5
	Semi-transparent Stains 2.9
	Semi-transparent and Clear Wood Preservatives
	2.9

Opaque Wood Preservatives	2.9
Specialty Flat Products	3.3
Specialty Primers, Sealers & Undercoaters	2.9
Traffic Coatings	
Applied to Public Streets and Highways	2.1
Applied to other Surfaces	2.1
Black Traffic Coatings	2.1
Varnishes	2.9
Waterproof Mastic Coating	2.5

- 5) Exemptions: [County Rule 335 §§306, 307] [SIP Rule 335 §§306, 307]
The VOC content requirement of this Permit Condition shall not apply to the following:
- a) Architectural coatings supplied in containers having capacities of one quart or less.
 - b) Architectural coatings recommended by the manufacturer for use solely as one or more of the following:
 - (1) Below ground wood preservative coatings.
 - (2) Bond breakers.
 - (3) Fire retardant coatings.
 - (4) Graphic arts coatings (sign paints)
 - (5) Mastic texture coatings.
 - (6) Metallic pigmented coatings.
 - (7) Multi-colored paints.
 - (8) Quick-dry primers, sealers and undercoaters.
 - (9) Shellacs.
 - (10) Swimming pool paints.
 - (11) Tile-like glaze coatings.

B. MONITORING AND RECORDKEEPING REQUIREMENTS

[County Rule 210 §302.1c] [County Rule 210 §302.1e]

The Permittee shall keep a material list of all coatings used. The material list shall contain the name of each coating, a short description of the material, the pounds of VOCs per gallon of coating excluding water and colorant added to tint bases, and the amount of each coating used. If the coating is exempt from the volatile organic compounds content requirements, the justification for the determination shall be documented and kept on file.

C. REPORTING REQUIREMENTS

[County Rule 210 §302.1e]

The Permittee shall include a statement whether or not architectural coating was performed during the six month reporting period in the semi-annual monitoring report.

26. CUTBACK AND EMULSIFIED ASPHALT:

A. OPERATIONAL LIMITATIONS

- 1) The VOC content of asphalt materials shall be limited as follows:

- a) The Permittee shall not use or apply the following materials for paving, construction, or maintenance of highways, streets, driveways, parking lots, roads, nor shall they be applied onto soil and earthworks:
 - (1) Rapid cure cutback asphalt.

- (2) Any cutback asphalt material, road oils, or tar which contains more than 0.5 percent by volume VOCs which evaporate at 500°F (260°C) or less using ASTM Test Method D 402-76.
- (3) Any emulsified asphalt or emulsified tar containing more than 3.0 percent by volume VOCs which evaporate at 500°F (260°C) or less as determined by ASTM Method D 244-89.

[County Rule 340 §301] [SIP Rule 340 §301]

- b) The Permittee shall not store for use any emulsified or cutback asphalt product which contains more than 0.5 percent by volume solvent-VOC unless such material lot includes a designation of solvent-VOC content on data sheet(s) expressed in percent solvent-VOC by volume.

[County Rule 340 §303] [SIP Rule 340 §303]

- 2) The VOC content limitations of this Permit Condition do not apply to the following:
 - a) Asphalt that is used solely as a penetrating prime coat and which is not a rapid cure cutback asphalt. Penetrating prime coats do not include dust palliatives or tack coats.

[County 340 §302.1] [SIP Rule 340 §302.1]

- b) The Permittee may use up to 3.0 percent solvent-VOC by volume for batches of asphalt rubber which cannot meet paving specifications by adding heat alone only if request is made to the Control Officer, who shall evaluate such requests on a case-by-case basis. The Permittee shall keep complete records and full information is supplied including savings realized by using discarded tires. The Permittee shall not exceed 1100 lbs (500 kg) usage of solvent-VOC in asphalt rubber in a calendar year unless the Permittee can demonstrate that in the previous 12 months no solvent-VOC has been added to at least 95 percent by weight of all the asphalt rubber binder made by the Permittee or caused to be made for the Permittee. This Permit Condition does not apply to batches which yield 0.5 percent or less solvent-VOC evaporated using the test in County Rule 340 § 502.1.

[County Rule 340 §302.3] [SIP Rule 340 §302.3]

B. MONITORING/RECORDKEEPING

[County 340 §501] [SIP Rule 340 §501] [County Rule 210 §302.1.c.(2)]

The Permittee shall keep daily records of the amount and type of asphaltic/bituminous material containing more than 0.5 percent by volume solvent-VOCs which is used at the facility. Records must show the solvent-VOC content of this material.

Material Safety Data Sheets (MSDS) or technical data sheets shall be kept available for any asphalt materials used at the facility. Records must be maintained in a readily accessible location and must be made available to the Control Officer upon request.

C. REPORTING:

[County Rule 210 §302.1.e.(1)]

The Permittee shall include the following information in the semiannual compliance report required by these Permit Conditions:

- 1) A statement on whether asphalt paving was conducted at the facility during the reporting period. If asphalt paving was conducted, then the following information shall also be included:

- a) A statement as to whether the recordkeeping requirements of these Permit Conditions relating to asphalt usage were met.
- b) A listing of any asphalt used that exceeded the VOC content limitations of these Permit Conditions and whether the exceedance was covered by an exemption covered by these Permit Conditions or whether it was a deviation from the requirements of this Permit Condition.

27. DUST GENERATING ACTIVITIES

A. DUST CONTROL PLAN REQUIRED

- 1) The Permittee shall submit a Dust Control Plan and obtain the Control Officer's approval of the Dust Control Plan, before commencing any routine dust generating operation. The Dust Control Plan shall describe all control measures to be implemented before, after and while conducting any dust generating operation, including during weekends, after work hours, and on holidays. The Plan shall include at least all the information contained in County Rule 310 §304. At least one primary control measure and one contingency control measure must be identified from Table 1 of County Rule 310.
[County Rule 310 §§303, 303.2, 303.3(b) and 303.4(a)]
[SIP Rule 310 §§303, 303.2, 303.3(b) and 303.4(a)]
- 2) Failure to comply with the provisions of an approved Dust Control Plan is deemed to be a violation of this Permit. Regardless of whether an approved Dust Control Plan is in place or not, the Permittee is still subject to all requirements of these permit conditions at all times. In addition, the Permittee with an approved Dust Control Plan is still subject to all of the requirements of County Rule 310, even if the Permittee is complying with the approved Dust Control Plan.
[County Rule 310 §§303.1 and 306] [SIP Rule 310 §§303.1 and 306]
- 3) If the Control Officer determines that an approved Dust Control Plan has been followed, yet fugitive dust emissions from any given fugitive dust source still exceed limits from this permit condition, then the Permittee shall make written revisions to the Dust Control Plan and shall submit such revised Dust Control Plan to the Control Officer within three working days of receipt of the Control Officer's written notice, unless such time period is extended by the Control Officer, upon request, for good cause. During the time that the Permittee is preparing revisions to the approved Dust Control Plan, the Permittee must still comply with all requirements of these permit conditions.
[County Rule 310 §305] [SIP Rule 310 §305]
- 4) If any changes to a Dust Control Plan, associated with a Title V Permit, are necessary as a result of the most recent revisions of County Rule 310, then the Permittee shall submit a revised Dust Control Plan to the Control Officer, according to the minor permit revision procedures describe in County Rule 210, no later than 6 months after the effective date of the most recent revisions to County Rule 310.
[County Rule 310 §402.2] [SIP Rule 310 §402.2]

B. ALLOWABLE EMISSIONS

The Permittee shall not allow visible fugitive dust emissions to exceed twenty percent (20%) opacity. Exceedances of the opacity limit that occur due to a wind event shall constitute a violation of the opacity limit. However, it shall be an affirmative defense in an enforcement action if the Permittee demonstrates all of the following conditions:

- 1) All control measures required were followed and one or more of the control measures listed below were applied and maintained;
 - a) Cease dust generating operations for the duration of the condition/situation/event when the 60-minute average wind speed is greater than 25 miles per hour. If dust generating operations are ceased for the remainder of the work day, stabilization measures must be implemented; or
 - b) Apply water or other suitable dust suppressant twice per hour; or
 - c) Apply water as necessary to maintain a soil moisture content at a minimum of twelve percent (12%) as determined by ASTM Method D2216-98 or other equivalent as approved by the Control Officer and the Administer of EPA. For areas which have an optimum moisture content for compaction of less than twelve percent (12%) as determined by ASTM Method D1557-91(1998) or other equivalent as approved by the Control Officer and the Administer of EPA, maintain at least seventy percent (70%) of the optimum soil moisture content.
- 2) The twenty percent (20%) opacity exceedance could not have been prevented by better application, implementation, operation, or maintenance of control measures;
- 3) The Permittee compiled and retained records, in accordance with Recordkeeping requirements of this permit; and
- 4) The occurrence of a wind event on the day(s) in question is documented by records. The occurrence of a wind event must be determined by the nearest Maricopa County Environmental Services Department Air Quality Division monitoring station, from any other certified meteorological station, or by a wind instrument that is calibrated according to manufacturer's standards and that is located at the site being checked.

[County Rule 310 §301 and Table 2][SIP Rule 310 §301 and Table 2]

C. OPERATIONAL LIMITATIONS AND STANDARDS

- 1) Unpaved Parking Lot
The Permittee shall not allow visible dust emissions from any unpaved parking lot to exceed twenty percent (20%) opacity, and either:
 - a) Shall not allow silt loading equal to or greater than 0.33 oz ft²; or
 - b) Shall not allow the silt content to exceed eight percent (8%).

[County Rule 310 §302.1][SIP Rule 310 §302.1]
- 2) Control Measures:
 - a) The Permittee shall implement control measures before, after, and while conducting any dust generating operation, including during weekends, after work hours, and on holidays. See subsection 304.3, Table 1 and Table 2 of County Rule 310. For the purpose of these Permit Conditions, any control measure that is implemented must meet the applicable standard(s) described in County Rule 310 §§301 and 302, as determined by the corresponding test method(s), as applicable, and must meet other applicable standard(s) set forth in County Rule 310. Failure to comply with the provisions County Rule 308 (Work Practices), as applicable, and/or of an approved Dust Control Plan, is deemed a violation of this Permit.

[County Rule 310 §306][County SIP Rule 310 §306]
 - b) Should any primary control measures(s) in an approved Dust Control Plan prove ineffective, the Permittee shall immediately implement the contingency control measure, which may obviate the requirement of submitting a revised Dust Control Plan. Any control measure that is implemented must meet the applicable standards

described in these permit conditions, as determined by the corresponding test method(s), as applicable, and must meet other applicable standards set forth in County Rule 310.

[County Rule 310 §§303, 303.2, 303.3(b) and 303.4(a)]

[SIP Rule 310 §§303, 303.2, 303.3(b) and 303.4(a)]

3) Work Practices:

Bulk Material Hauling Off-Site Onto Paved Public Roadways

When engaged in bulk material hauling off-site onto paved public roadways, the Permittee shall comply with the following work practices. Such work practices shall be implemented to meet the standards described in County Rule 310 §§ 301 and 302..

- a) Load all haul trucks such that the freeboard is not less than three inches; and
- b) Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and / or tailgate(s); and
- c) Cover all haul trucks with a tarp or other suitable closure; and
- d) Before the empty haul truck leaves the site, clean the interior of the cargo compartment or cover the cargo compartment.

[County Rule 310 §308.1][SIP Rule 310 §308.1]

[SIP Rule 31, 6(a) and 6(b)]

D. MONITORING AND RECORDKEEPING REQUIREMENTS

The Permittee shall keep a daily written log recording the actual application or implementation of the control measures delineated in the approved Dust Control Plan. The log or the records and supporting documentation shall be made available to the Control Officer within 48 hours, excluding weekends, from written or verbal request. If the Control Officer is at the site where requested records are kept, records shall be provided without delay.

[County Rule 310 §502] [SIP Rule 310 §502]

Copies of approved Dust Control Plans, control measures implementation records, and all supporting documentation shall be retained at least five years from the date such records are established.

[County Rule 310 §503] [SIP Rule 310 §503]

28. SOLVENT CLEANING

A. OPERATIONAL LIMITATIONS/STANDARDS:

1) EQUIPMENT RESTRICTIONS

[County Rule 210 §302.1]

All cleaning machines shall be one batch loaded cold cleaners without a remote reservoir (such as solvent dip tank);

2) SOLVENT HANDLING REQUIREMENTS

[County Rule 331 §301] [SIP Rule 331 §301]

The Permittee shall comply with all of the following requirements:

- a) All cleaning-solvent, including solvent soaked materials, shall be kept in closed leakfree containers that are opened only when adding or removing material.
 - (1) Rags used for wipe cleaning shall be stored in closed containers when not in use.
 - (2) Each container shall be clearly labeled with its contents.
- b) If any cleaning-solvent escapes from a container the Permittee shall:
 - (1) Wipe up or otherwise remove immediately if in accessible areas.

- (2) For areas where access is not feasible during normal production, remove as soon as reasonably possible.
 - c) Unless records show that VOC-containing cleaning material was sent offsite for legal disposal, it will be assumed that it evaporated on site.
- 3) EQUIPMENT REQUIREMENTS FOR ALL CLEANING MACHINES:
[County Rule 331 §302] [SIP Rule 331 §302]
 - a) The Permittee shall provide a leakfree container (degreaser) for the solvents and the articles being cleaned.
 - (1) The VOC-containment portion shall be impervious to VOC-containing liquid and vapors.
 - (2) No surface of any freeboard required by this rule shall have an opening or duct through which VOC can escape to the atmosphere except as required by OSHA.
 - b) The Permittee shall maintain and operate all cleaning machine equipment required by this Permit and any of its emission controls required by this Permit.
- 4) SPECIFIC OPERATING & SIGNAGE REQUIREMENTS FOR CLEANING MACHINES
[County Rule 331 §303] [SIP Rule 331 §303]
 - a) The Permittee shall conform to the following operating requirements when cleaning with cleaning-solvents other than Low-VOC Cleaners:
 - (1) Comfort fans shall not be used near cleaning machines;
 - (2) Do not remove any device designed to cover the solvent unless processing work in the cleaning machine or maintaining the machine;
 - (3) Drain cleaned parts for at least (15) fifteen seconds after cleaning or until dripping ceases, whichever is later;
 - (4) If using a cleaning-solvent spray system:
 - (a) Use only a continuous, undivided stream (not a fine, atomized, or shower type spray).
 - (b) Pressure at the orifice from which the solvent emerges shall not exceed (10) ten psig and shall not cause liquid solvent to splash outside the solvent container.
 - (c) In an in-line cleaning machine, a shower-type spray is allowed, provided that the spraying is conducted in a totally confined space that is separated from the environment.
 - (d) Exceptions to the foregoing subsections 1), 2), and 3) are provided for in Special Non-vapor Cleaning Situations in the section titled the same below.
 - (5) The Permittee shall not cause agitation of a cleaning-solvent in a cleaning machine by sparging with air or other gas. Covers shall be placed over ultrasonic cleaners when the cleaning cycle exceeds (15) fifteen seconds;
 - (6) The Permittee shall not place porous or absorbent materials in or on a cleaning machine. This includes, but is not limited to, cloth, leather, wood, and rope. No object with a sealed wood handle, including a brush, is allowed;
 - (7) The ventilation rate at the cleaning machine shall not exceed 65 cfm per square foot of evaporative surface ($20 \text{ m}^3/\text{min}/\text{m}^2$), unless that rate must be changed to meet a standard specified and certified by a Certified Safety Professional, a Certified Industrial Hygienist, or a licensed professional

- engineer experienced in ventilation, to meet health and safety requirements;
- (8) Limit the vertical speed of mechanical hoists moving parts in and out of the cleaning machine to a maximum of 2.2 inches per second and (11) eleven ft/min (3.3 m/min);
 - (9) The Permittee shall prevent cross contamination of solvents regulated by Section 304 of Rule 331 with solvents that are not so regulated. Use signs, separated work-areas, or other effective means for this purpose. This includes those spray gun cleaning solvents that are regulated by another rule.
- b) When using cleaning-solvent, other than Low-VOC Cleaner, in any solvent cleaning machine (degreaser) or dip tank, the Permittee shall provide the following signage requirements on the machine, or within 3¼ feet (1 meter) of the machine, a permanent, conspicuous label, or placard which includes, at a minimum, each of the following applicable instructions, or its equivalent:
- (1) "Keep cover closed when parts are not being handled." (This is not required for remote reservoir cleaners.)
 - (2) "Drain parts until they can be removed without dripping."
 - (3) "Do not blow off parts before they have stopped dripping."
 - (4) "Wipe up spills and drips as soon as possible; store used spill rags [or 'wiping material'] in covered container."
 - (5) "Don't leave cloth or any absorbent materials in or on this tank."
 - (6) For cleaning machines with moving parts such as hoists, pumps, or conveyors, post: "Operating instructions can be obtained from _____" where the Permittee shall list a person or place where the instructions are available.
- 5) SOLVENT SPECIFICATION [County Rule 331 §304] [SIP Rule 331 §304]
All cleaning solvents, except Low-VOC Cleaners, shall be conforming solvents. A conforming solvent is one which has a total VOC vapor pressure at 68°F (20°C) not exceeding 1 millimeter of mercury column maximum total VOC vapor pressure.
- 6) BATCH CLEANING MACHINES [County Rule 331 §305] [SIP Rule 331 §305]
Without Remote Reservoir - The Permittee shall equip each batch cleaning machine without a remote reservoir with all of the following:
- a) Have and use an internal drainage rack or other assembly that confines within the freeboard all cleaning-solvent dripping from parts and returns it to the hold of the cleaning machine (degreaser).
 - b) Have an impervious cover which when closed prevents cleaning-solvent vapors in the cleaning machine from escaping into the air/atmosphere when not processing work in the cleaning machine. The cover shall be fitted so that in its closed position the cover is between the cleaning-solvent and any lip exhaust or other safety vent, except that such position of cover and venting may be altered by an operator for valid concerns of flammability established in writing and certified to by a Certified Safety Professional or a Certified Industrial Hygienist to meet health and safety requirements.
 - c) The freeboard height shall be not less than 6 inches (15.2 cm). Freeboard height for batch cleaning machines is the vertical distance from the solvent/air interface to the least elevated point of the top-rim when the cover is open or removed, measured during idling mode.

- d) The freeboard zone shall have a permanent, conspicuous mark that locates the maximum allowable solvent level which conforms to the applicable freeboard requirements.

B. MONITORING/RECORDKEEPING: [County Rule 331 §501] [SIP Rule 331 §501]

1) Current List

- a) The Permittee shall maintain a current list of cleaning-solvents; state the VOC-content of each in pounds VOC per gallon of material or grams per liter of material.
- b) If the Permittee uses any cleaning-solvent that is not a low VOC cleaner, then the Permittee shall have on site the written value of the total VOC vapor-pressure of each such solvent in one of the following forms:
 - (1) A manufacturer's technical data sheet,
 - (2) A manufacturer's safety data sheet (MSDS), or
 - (3) Actual test results.

2) Usage Records

- a) Monthly - The Permittee shall record the amount of cleaning-solvent used at the end of each month for the previous month. Show the type and amount of each make-up and all other cleaning-solvent.
- b) Annually
 - (1) Certain Concentrates – The Permittee shall document the use of concentrate that is used only in the formulation of Low VOC Cleaner.
 - (2) Low VOC Cleaners – The Permittee need not keep a record of a cleaning substance that is made by diluting a concentrate with water or non-precursor compound(s) to a level that qualifies as a Low VOC Cleaner if records of the concentrate usage are kept in accordance with this Permit.
 - (3) Grouping By VOC Content - For purposes of recording usage, the Permittee may give cleaning-solvents of similar VOC content a single group-name, distinct from any product names in the group. The total usage of all products in that group are then recorded under just one name. (In such case the Permittee shall also keep a separate list that identifies the product names of the particular solvents included under the group name.) To the group name shall be assigned the highest VOC content among the members of that group, rounded to the nearest 10th of a pound of VOC per gallon of material, or to the nearest gram VOC per liter of material.

C. REPORTING: [County Rule 210 §302.1.e.(1)]

The Permittee shall include the following information in each semiannual compliance report;

- 1) certification that the operational requirements, specifically applicable to the Permittee's type of cleaning, continue to be in compliance;
- 2) a summary of the listed cleaning-solvents currently used at the facility and state the VOC-content of each in VOC per gallon of material or grams per liter of material;
- 3) certification that monthly and annual recordkeeping was performed as directed in the monitoring/recordkeeping requirements above; and
- 4) a summary of any testing that may have been performed during the period.

Mastercraft Cabinets, Inc.
305 South Brooks Circle
Permit Number V97-004
May 10, 2006

APPENDIX A
Equipment List for Mastercraft Cabinets , Inc.
305 South Brooks Circle
Permit V97-004

Mastercraft Cabinets, Inc.
305 South Brooks Circle
Permit Number V97-004
May 10, 2006

Assigned Equip. #	Equipment Description	Manufacturer	Serial Number	Model	HP,KVA, Gallons, or other rating	Vent to Air	Vent to Control	Status / Location
1	Parts Cleaner	Gray Mills		PL36	10 gallons	x		Maintenance
6	Time saver sanding machine	TimeSavers, Inc.	17839	337-2HD	3phase/60Hz		x	Cutting Room
14	Router table	Porter Cable	n/a	5201		x		Stock Front assembly
15	Router table	Porter Cable	40716	5201		x		Stock Front assembly
16	Router/shaper	Powermatic	9527344	27		x		Stock Front assembly
17	Hinge boring machine	Blum Mini Press	CF7348	1999	1.10 KW		x	Stock Front assembly
18	Hinge boring machine	Blum Mini Press	CF7349	1999	1.10 KW		x	Doors
19	Hinge boring machine	Blum Mini Press	CF7359	1999	1.10 KW		x	Doors
20	Hinge boring machine		CF09784	2000	1.10 KW		x	Doors
21	Hinge boring machine	Blum Mini Press	CF7352	1999	1.10 KW		x	Doors
22	Hinge boring machine	Blum Mini Press	CF7340	1999	1.10 KW	x		Behind Maint. Shop
23	Hinge boring machine	Blum Mini Press	CF7341	1999	1.10 KW	x		Behind Maint. Shop
27	TSM screw pocket machines	Castle	20412	TSM-20		x		Cutting Room
28	TSM screw pocket machines	Castle	51517	TSM-20			x	Cutting Room
29	Unisaw table saw 10"	Rockwell	E44368	64-450			x	Cutting Room
30	Unisaw table saw; 10"	Rockwell	DS1105	34-350			x	Cutting Room
31	10" Unisaw table saw	Delta	97-G95607	36-812			x	Cutting Room
32	Panel Saw	CMT		360-164FH			x	Cutting Room
33	Miter base cutoff saw	Pistorious		52277			x	Cutting Room
34	Bandsaw	Rockwell	1501733	28-350		x		Cutting Room
35	Bandsaw	Rockwell	1530733	28-3X0		x		Behind Maint. Shop
38	Portable bag dust collector	Dayton	9801	6C503A			x	Behind Maint. Shop
39	Portable barrel top dust collector	Cincinnati Dust Master	G007964	100S	1 HP		x	Stock Front assembly
40	Portable barrel top dust collector	Cincinnati Dust Master	G007926	100S	1 HP		x	Behind Maint. Shop
41	Portable barrel top dust collector	Cincinnati Dust Master	G006277	100S	1 HP		x	Located by glue dispensing drum
42	Baghouse	DCE Vokes 200 bag	18303	DLM 4/4/10		x		outside: north side of building

Mastercraft Cabinets, Inc.
305 South Brooks Circle
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43	Baghouse	TORIT (160 bag)	IG425432	HPT160		x		outside: north side of building
104	Baghouse	DCE Vokes	851469	DLM 1-2-10		x		outside: north side of building
44	Stain spray booth	Venjakob		VJB1/CS5/8AM/SCB-PH		x		#5 Paint Line
45	Stain spray booth	Venjakob		VJB1/CS5/8AM/SCB-PH		x		#14 Paint Line
46	Orbital Sander	Dynabrade		CE	12,000 rpm	x		Stain Spray Paint Line
47	Sealer spray booth	Venjakob		VJB1/CS7/8AM/SCB-PH		x		#23 Paint Line
48	Lacquer spray booth	Venjakob		VJB1/CS7/8AM/SCB-PH		x		#31 Paint Line
51	Hand spray booth	Binks		PFA-128-T-LH		x		
52	20 Spray Guns (at Stain Booths))			207-614	150-600 psi		x	Stain Booths
53	10 Spray guns (at Sealer Booths)	Graco		207-614	150-600 psi		x	Sealer Booths
54	6 Paint guns	Binks		2001			x	Hand spray Booth
55	Paint Gun for air-powered pump	Graco Plus			5000 psi			Compressor Room
56	Spray paint gun	Graco		1-235463/D98D				Maintenance
57	Spray paint gun	Graco		1-255464/K99C				Maintenance
58	3 paint pots	Binks		83-15580	20-40 psi	x		Hand Spray Booth
59	3 Accuspray Spray Guns	Accuspray		19 series		x		Hand spray Booth
60	2 Cup Guns	Accuspray		19 series		x		Hand spray Booth
61	1 paint pot	Binks		83-5676	20-40 psi	x		Maintenance
62	1 paint pot	Binks		83-2860	20-40 psi	x		Maintenance
63	1 paint pot	Binks		(no ID to be found)		x		Maintenance
64	Air-powered Paint pump	President		223843	3600 psi	x		Maintenance
65	White Stain Pump	Graco		223-841	45 psi	x		Paint pump room
66	3 Stain Pumps	Graco		236-455	25 psi	x		Paint pump room
67	Stain Pump (Portable)	Graco		207-707	40 psi	x		Stain Booth
68	Stain Pump (Portable)	Graco		207-352	40 psi	x		Compressor Room
69	Stain Pump (Portable)	Glutton		220-667	45 psi	x		Stain Booth
70	Thinner Pump	Graco		208-407	20 psi	x		Paint pump room

Mastercraft Cabinets, Inc.
 305 South Brooks Circle
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71	2 Topcoat and Seal Pumps	Graco		217-527	50 psi	x		Paint pump room
72	Stain Pump	Graco		208-356		x		Paint pump room
73	Horizontal oven	Super-Fici				X		#7 Paint Line
74	Horizontal oven	Super-Fici				X		#16 Paint Line
75	Vertical oven	Super-Fici				X		#26 Paint Line
76	Vertical oven	Super-Fici				x		#34 Paint Line
77	Blowing device #22	Super-Fici					x	Sealer Line
78	Blowing device #29	Super-Fici					x	Lacquer Line
79	Blowing device #12	Super-Fici					x	Stain Line; 2nd side
80	Blowing device #3	Super-Fici					x	Stain Line: 1st side
83	Edge Bander	SCMI	AN 00824	Basic 2			X	Cutting room
84	Boiler	Ajax	85-37978	OWGH 1750-S		X		
85	Boiler	Ajax	85-37980	OWGH 1750-S		X		
86	Air Compressor	Gardner	M30253			x		North side of facility; outside
87	Air Compressor	Gardner	M13686			X		North side of facility; outside
97	Chopsaw (or Power Miter Box)	DeWalt	143827	DW703		x		Specials
98	Chopsaw (or Power Miter Box)	DeWalt	232417	DW703		x		Cutting Room
99	ShopSaver Drill			4896		x		Stock Front / Drawers
100	2-head Line Bore Machine					x		Cutting Room
101	Unisaw table saw 10"	Rockwell / Delta	EC9452	34-450		x		Cutting Room
102	Graco Monark pump	Graco	E03B	231964		x		Hand Spray Booth
103	Graco Monark pump	Graco	G04B	231964		x		Hand Spray Booth
105	Router - Hand held	Porter Cable		75362		X		Glass
108	Blast Cabinet	Econoline	11430	RA36-1 Super		x		Maintenance

Mastercraft Cabinets, Inc.
305 South Brooks Circle
Permit Number V97-004
May 10, 2006

APPENDIX B

Insignificant Equipment

Mastercraft Cabinets, Inc.
305 South Brooks Circle
Permit Number V97-004
May 10, 2006

Assigned Equip. #	Equipment Description	Manufacturer	Serial Number	Model	HP,KVA, Gallons, or other rating	Vent to Air	Vent to Control	Status / Location
2	8" bench top Drill Press	Delta	w-9622	11-950		x		Maintenance
3	Vertical floor drill press	Rockwell	1479514	15-017		x		Maintenance
4	Vertical floor drill press	Blackhawk	7335	FM-917		x		Stock Front assembly
5	Vertical floor drill press	Rockwell		DP220		x		Stock Front assembly
7	Orbital Sander	Dynabrade		CE	10,000 rpm	x		Cutting Room
8	Orbital Sander	Dynabrade		CE	10,000 rpm		x	Cutting Room
9	Bench mount disc/belt sander	Dayton	9711	6Y001		x		Maintenance
10	Hori belt sander	Rogers				x		Cutting Room
11	Pedestal grinder	Dayton	F598B	23Z41P		x		Maintenance
12	Bench mount grinder	Baldor	F875	610E		x		Behind Maint. Shop
13	Bench mounted wire wheel	no visible name	n/a	n/a		x		Behind Maint. Shop
36	Arc Welder	Lincoln	code 7533-707	AC225-S	AC 225 amp	x		Maintenance
37	Mig welder	Lincoln	1026-U1971008487	SP-170T		x		Maintenance
81	Electric glue gun	Polygun EC	15721			X		Drawer Assembly
82	Wet/Dry Vac	Rigid			16 gallons	X		Maintenance
95	Electric Branding Iron	Wallbrand		WBTR3		X		Drawer Assembly
96	Router-Table top	Porter Cable	707132A7984	1001		x		Glass
49	(4) Orbital Sanders	Dynabrade			10,000 rpm	x		Lacquer Line
50	(3) Orbital Sanders	Dynabrade		CE	10,000 rpm		x	Sanding Dept.
24	(2) Orbital Sanders	Dynabrade		CE	10,000 rpm	x		Specials
25	(2) Hand Drills	Sioux Tools	SEBA & SCLA	2P2603AQ and 2L2607		x		Specials
26	(1) Hand Drill	Central				x		Specials
107	Electric Stock Picker	Raymond	AE20121	OPC30TT		x		Warehouse

Mastercraft Cabinets, Inc.
305 South Brooks Circle
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109	Spent Aerosol Can Disposal System	Justrite					x	North Dock
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Mastercraft Cabinets, Inc.
305 South Brooks Circle
Permit Number V97-004
May 10, 2006

APPENDIX C
Permitted
Equipment to be Installed

Equipment to be installed in 180 days	Equipment to be installed Later
48" widebelt 3 head sander	Baghouse @35K cfm
Belt Sander	48" side belt cross grain sander
Panel Saw (Holzma 33)	36" wide belt three head sander
Side boring machine	Fladder Sander
Edgebander	Veneer Panel Sander
CNC- Plywood Machining	Large Shaper
Dado saws	Manual pocket boring machine
Dado saws	Shelf hole drill machine
Dado saws	CNC – hardwood machining
Top/Btm notcher	Hinge Boring Machine
Toe Kick notcher	
Sliding table saw	
Small Shaper	
Automatic pocket boring machine	

Mastercraft Cabinets, Inc.
305 South Brooks Circle
Permit Number V97-004
May 10, 2006

TECHNICAL SUPPORT DOCUMENT

Mastercraft Cabinets, Inc.
305 South Brooks Circle
Mesa, AZ 85202
Permit Number V97-004
June 3, 2005

Facility Name: Mastercraft Cabinets, Inc.
Address: 305 South Brooks Circle
City, State, Zip: Mesa, AZ 85202

Permit Application Number: V97-004
Date Application Received: September 9, 1997

Permit Engineer: Jack E. Dallal

TSD Revision Date: June 3, 2005

1. INTRODUCTION:

This is a support document intended to provide additional information associated with the issuance of the Title V air quality permit to Mastercraft Cabinets, Inc. However, this TSD is not part of the Permit and is not intended to be a legally enforceable document.

Mastercraft Cabinets, Inc. operates a cabinet parts coating and assembly plant located at 305 South Brooks Circle in Mesa, Arizona. The facility is located on approximately 3.5 acres of property.

The facility receives pre-manufactured cabinet parts by truck. The cabinet parts, (predominately frames, fronts and doors), whether pre-manufactured or produced on site, are placed on a conveyer belt that feeds through a finishing line. Prior to entering the process, hardwood cabinet parts are sanded. The process starts at a sanding machine that finely sand the material. The cabinet parts then pass through a series of steps that include spraying machines, and wiping machines.

2. SOURCE DESCRIPTION:

The Mastercraft Cabinets, Inc. facility is a manufacturing plant (SIC Code 2434) for the production of hard wood cabinets. The manufacturing process can be described as an activity including woodworking, assembly, finishing and warehousing.

Mastercraft is classified as a major source of VOCs, (which are precursors to the formation of ozone, which is a criteria pollutant) and federally listed hazardous air pollutants (HAPs). The primary source of the VOCs and HAPs are from spray coating of finishing coatings on the wood cabinets. Particulate matter with an aerodynamic diameter less than 10 microns (PM₁₀), Nitrogen oxides,

(NO_x), Carbon Monoxide, (CO), and Sulfur Dioxide, (SO₂), will not be emitted from the Mastercraft facility in quantities exceeding their respective major source thresholds.

3. DESCRIPTION OF PRODUCTION ACTIVITIES:

A. Blowing Devices

The four blowing devices consist of a large hood with an air stream to blow the cabinet parts clean of particulate previous to entering the spray machines. After passing over the parts, the air stream is pulled into the baghouse ductwork.

B. Spray Machines

These are automated spray machines for applying stains, sealers or topcoats. Machines are enclosed and vented through roof-top stacks.

C. Sanding Table

Hardwood cabinet parts are lightly sanded prior to the finishing line. There is also sealer sanding prior to application of the topcoat.

D. Spray Booth

A small amount of coatings are applied in a stand-alone spray booth. Some of the needs for the booth include: stain defect touch-up; color matches to colors no longer in stock; new color development; special colors and hand wiped colors; and very low volume colors.

E. Woodworking Equipment

Various pieces of woodworking equipment will be used to size wood into cabinet parts in the event that performing this process becomes advantageous to the facility. The equipment is listed in the appendix of the permit conditions.

F. Assorted Product Handling Equipment

The facility also has various pieces of non-emitting equipment such as conveyers, turnover machines, etc.

G. Boilers

The facility has two 1.75 MMBtu natural gas fired hot water boilers that provide hot water to the coils in the air heaters. They are used for heating the building during the winter months.

H. Hand Wiping

Hand wiping is done at a stand alone booth.

4. EMISSIONS:

A. VOC Emissions

VOC emissions at Mastercraft are not seasonal. Annual production was estimated to be spread evenly through the year. The actual VOC emissions from the year 1993 to 2002 can be seen in Table 1. 1983, 1984, 1985, 1988 and 1990 VOC emissions were also found in old hardcopy emission inventory books or reports. The data was submitted by Mastercraft to the emissions inventory group at MCESD. This data are also included in Table 1.

TABLE 1:

VOC Emissions		
year	lbs/yr	tons/yr
2003	309025	154.5
2002	243964	122.0
2001	227523	113.8
2000	181129	90.6
1999	165492	82.7
1998	125442	62.7
1997	178220	89.1
1996	180153	90.1
1995	209710	104.9
1994	280674	140.3
1993	151883	75.9
1990	314800	157.4
1989	262600	131.3
1985 ³	469800	234.9
1984 ⁴	456000	228.0
1983	442800	221.4

VOC emissions are calculated using a mass balance in combination with usage records of the coatings. There currently is no VOC control equipment at the facility; therefore the amount of VOC used, minus any VOCs shipped off site as waste is equal to the amount emitted to the atmosphere. VOCs are emitted predominantly by the spray coating operations. Records must be maintained on site showing the amount of all material used and the technical data sheets containing the VOC and HAP content of all materials used. Recordkeeping is required in the permit to ensure that the facility wide annual and monthly VOC emission limit will not be exceeded. The same methodology is used when calculating the HAP monthly and annual emissions.

B. VOC Emission Limits

The Title V Permit contains monthly and annual limits for facility wide VOC emissions. There are no previous permit conditions for specific activities. The source voluntarily accepted a facility wide annual VOC limit of 245 tons per year. A monthly facility wide VOC limit of 24.5 tons is also in the Title V Permit. These limits will be enforceable by requiring Mastercraft to maintain monthly records of coating and materials usage and the calculations of the corresponding VOC emissions. When the rolling twelve-month total for estimated VOC emissions exceeds 220 tons the records of estimated VOC emissions are required to be kept on a more frequent weekly basis.

5. PREVIOUS MODIFICATIONS:

³ Extrapolated from the 1983 MCESD Emissions Report uses an assumed 3% growth factor.

⁴ Extrapolated from the 1983 MCESD Emissions Report using an assumed 3% growth factor.

Mastercraft Cabinets, Inc.
305 South Brooks Circle
Permit Number V97-004
May 10, 2006

A modification was submitted to MCESD on December 15, 1986. The modification entailed the installation of the finishing line in service at the facility today. Included in the modification were 4 spray booths, two drying ovens and 30 airless spray guns with a water wash exhaust system for particulate control. It is unclear if all the equipment was newly installed or if some of the equipment was existing previously. It is assumed that all of the equipment was installed with the approval of the modification.

Mastercraft Inc. was in operation and a major stationary source of VOC emissions prior to New Source Review regulation, (NSR), in 1978 and therefore was a “grandfathered” facility and had no VOC annual emission limits applicable to the facility. The area where the source is located was designated moderate non-attainment in 1986 and had the significant level for VOC was 40 tons. Currently the area is designated serious non-attainment with a significant threshold of 25 tons for VOC. The installation permit was granted by this Department on December 23, 1986. There is no record of a technical review to verify if the modification to an existing major stationary source resulted in a net emissions increase of VOC greater than or equal to the significant emission rate of 40 tons.

In order to expedite the issuance of this Title V Permit, Mastercraft Inc. voluntarily accepted an annual limit for VOC of 245 tons. The best available information to estimate the VOC emissions for the facility is the 1983 surface coating emissions report from MCESD Emissions Inventory. It was reported that Mastercraft used 1,895 gallons of solvent and 3,630 gallons of paint coating on a monthly basis with an estimated annual VOC emissions of 221 tons. The 1984 and 1985 numbers were extrapolated from the 1983 report. To be conservative, the 1983 numbers were used as the past actual VOC emissions. Summing the 1983 reported VOC emissions and the 40 ton significance threshold results in a total of 261 tons. MCESD has accepted the voluntary limit of 245 tons of VOC per year offered by Mastercraft Inc. and is satisfied using the best available information that a New Source Review infraction did not occur.

6. TESTING REQUIREMENTS:

The USEPA Region has issued a 114 letter to Mastercraft requiring that the source conduct a performance test to determine the emission rate of the DCE Vokes Dust Collector and the Donaldson Torit Dust Collector. This test is being conducted in order to demonstrate compliance with SIP Rule 311.

i. DISPERSION MODELING:

Screen3 modeling was conducted for methanol, toluene, xylene, ethyl benzene, methyl ethyl ketone (MEK), and n-hexane according to MCESD “Air Toxics/Hazardous Air Pollutant Permitting Procedure” (2/29/00 Draft). These pollutants were modeled due to the significant level of emissions defined as 500 pounds or greater emitted annually of a specific HAP. The model results are compared to the Arizona Ambient Air Quality Guidelines, (AAAQG). The AAAQGs are calculated using a human health-based approach developed by the Arizona Department of Health Services. The One-hour and 24-hour AAAQGs use exposure limits established or recommended by the United States Occupational, Safety and Health Administration (OSHA), the National Institute of Occupational Safety and Health (NIOSH), and the National Institute for Environmental Health Sciences (NIEHS).

The actual emission rates for these pollutants were determined by converting the actual 2003 annual emissions to units based on micro-grams per second. Two-thousand hours of operation was estimated assuming full time operation. HAPs are emitted from multiple stacks. For modeling purposes it was assumed that they are emitted from one stack. The maximum potential ambient impacts of the HAPs were extrapolated by multiplying the actual modeling results submitted by Mastercraft by a ratio of 1.58 or (245/155). This ratio was derived by dividing the annual VOC limit of 245 tons by the 2003 actual VOC emissions of 155 tons. The following parameters were used for the modeling.

Input Parameters:

Stack Height:	7.5185 m (height above ground)
Stack Diameter:	0.3557 m (inside diameter)
Exit Gas Velocity:	19.5682 m/s
Receptor Height:	1.8288 m
Exit Gas Temperature:	293 K

Table 2 contains the information and results of the Screen3 model.

Table 2:

Chemical	Emissions (lbs/yr)	1-hr AAAQG (ug/m ³)	24-hr AAAQG (ug/m ³)	Model Result 1-hr (ug/m ³)	Model Result 24-hr (ug/m ³)
Methanol	3090.4	2,600	2,100	95.7	38.3
Toluene	66652.3	4,400	3,000	2063.5	825.4
Xylene	34036.3	5,400	3,500	1053.9	421.5
Ethyl Benzene	6948.8	4,500	3,500	215.0	86.0
Methyl Ethyl Ketone	22458.1	7,400	4,700	695.4	278.1
N-Hexane	2618.1	5,400	1,400	81.1	32.4

The results of the model showed that the AAAQGs for the 1-hour and 24-hour guidelines were not exceeded using a worst case scenario. MCESD accepted the Mastercraft analysis that the AAAQGs will not be exceeded.

8. Applicable Requirements

A. County Rule 300 and SIP Rule 30 – Opacity Limits

1) DISCUSSION

County Rule 300 restricts visible emissions from any source to 20% opacity or less, other than emissions of uncombined water. County Rule 300 and the 20% opacity limitation of the permit conditions are locally enforceable only. SIP Rule 30 and the 40% opacity limitation of the permit conditions are federally enforceable.

2) MONITORING

The Permittee is required to perform observations on a daily basis looking for visible emissions other than steam. This requirement monitors for the presence of opacity from sources that vent outdoors.

If visible emissions are observed, the Permittee must begin a monitoring schedule which requires that a certified visible emissions evaluator determine the opacity of the emissions using the techniques specified in EPA Reference Method 9.

The initial Method 9 opacity reading must be taken within twenty four (24) hours of observing visible emissions. If the emitting equipment is not operating on the day that the initial Method 9 opacity reading is required to be taken, then the initial Method 9 opacity reading must be taken the next day that the emitting equipment is in operation. If the problem causing the visible emissions is corrected before the initial Method 9 opacity reading is required and there are no visible emissions while the equipment is in normal operation, the Permittee is not required to conduct the Method 9 opacity reading.

After the initial reading, follow-up Method 9 opacity readings must be performed in accordance with the following schedule:

a) Daily:

- (1) A Method 9 opacity reading must be conducted each day that the emitting equipment is operating until a minimum of 14 daily Method 9 readings have occurred. This is to provide a degree of confidence that the readings are consistent and not fluctuating in and out of compliance.
 - (2) If the Method 9 opacity is less than 20% for 14 consecutive days, the frequency of Method 9 opacity readings may be decreased to weekly.
- b) Weekly:
- (1) If the Permittee has obtained 14 consecutive daily Method 9 readings which do not exceed 20% opacity, the frequency of Method 9 readings may be decreased to once per week for any week in which the equipment is operated.
 - (2) If the opacity measured during a weekly Method 9 reading exceeds 20%, the frequency of Method 9 opacity readings shall revert to daily.
 - (3) If the opacity measured during the weekly Method 9 readings never exceeds 20%, the Permittee must continue to obtain weekly opacity readings until no visible emissions are present.
- c) Cease Follow-up Method 9 Opacity Monitoring:
Regardless of the applicable monitoring schedule, follow-up Method 9 opacity readings may cease if the emitting equipment, while in its standard mode of operation, has no visible emissions, other than uncombined water, during every observation taken during a Method 9 procedure.

B. County Rule 311 and SIP Rules 311 and 31.B - Particulate Matter for Woodworking Emission Limitations

- 1) Discussion
The facility is subject to County Rule 311, Particulate Matter from Process Industries, which imposes a cap on hourly emissions of particulate matter based on the process weight of material at the facility. The facility does not process more than 60,000 pounds per day of wood, therefore, an applicable requirement is County Rule 311 §301.1, with the following process weight rate equation:

$$E = 3.59P^{0.62}$$

Where:

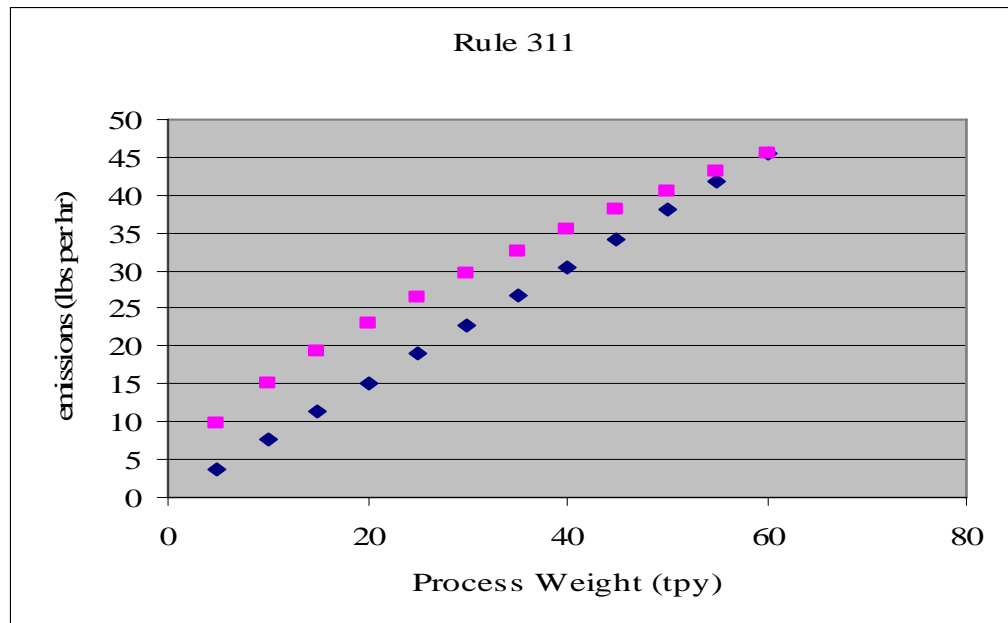
E = Emissions in pounds per hour, and

P = Process weight rate in tons per hour.

Also applicable are County Rule 311 §§305 and 306, which allow Mastercraft to comply with the particulate matter standard by operating an approved "emission control system", with an approved O&M plan. Mastercraft operates a DCE Vokes Dust Collector in parallel with a Donaldson Torit Dust Collector. The setup uses a total of three groups of fabric filters with three dust collectors. There are two motors that power these units. Together the three baghouses exhaust 35,000 cubic feet per minute (cfm). The bag removal filtration capability is documented at 99.5% on typical woodworking emissions.

- 2) Monitoring for Compliance with Woodworking Emission Limitations
Figure 1, below shows a plot of the allowable particulate matter emissions at a facility in pounds per hour (E) versus the weight of wood processed at the facility in tons per hour (P) according to the equation $E = 3.59P^{0.62}$. This is shown with the squares. The figure also shows the estimated actual emission using the assumptions outlined below. The estimated actual emissions are shown in diamonds.

Figure 1:



Emission Limits Calculated by Process Weight Rate Equation

Figure 1 shows that the actual emissions were below the allowable emissions with an assumed baghouse efficiency of 99.5% or greater. A source test is required for each baghouse by the USEPA 114 letter and these permit conditions to verify the efficiency of or actual emissions from the particulate control devices. If the 99.5% control efficiency is not verified with the source test, the source shall confirm that they are in compliance with the process weight rate equation in Rule 311 by performing the process rate calculation. The following assumptions were used to calculate the estimated emissions:

- The facility only performs sanding at the facility with small amounts of cutting therefore it is assumed that 10% of the mass of wood product brought into the facility becomes waste.
- 76% of the waste is PM₁₀₀. This number is taken from the North Carolina study.
- The baghouse achieves 99.5% control efficiency.
- The facility operates 40 hours a week, 52 weeks a year.

The North Carolina Study

A draft report entitled "Estimating Emissions from Generation and Combustion of 'Waste' Wood," (North Carolina Report) by the North Carolina Department of Environment and Natural Resources, gives the following estimate of the percentages of wood waste generated by various processes at a woodworking facility:

Rough Sawing	20%
Fine Sawing	30%
Sanding	20%

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Molding (hog) 40% (sic)

That report also estimates the percentages of wood waste that is generated by a process that is regulated as PM (<100 micrometer aerodynamic diameter) as follows:

Rough Sawing	18%
Fine Sawing	31%
Sanding	76%
Molding	5.2%

The total percentage of wood waste generated at a woodworking facility that is regulated as PM can be estimated by multiplying the percentage of the wood waste generated by a process and the percentage of that wood waste that is regulated as PM. It was assumed that Mastercraft only sands wood so 76% of the wood waste is PM₁₀₀.

- 3) Baghouses
Mastercraft has submitted a minor modification to vent the baghouses back into the facility to avoid venting to the ambient air and currently do so. This step was taken to avoid County Rule 311 applicability. This permit did not address the applicability of County Rule 311 for facilities that vent particulate control devices indoors and Rule 311 is applicable to Mastercraft at this time. Although MCESD has reservations concerning the venting of the baghouses indoors, this issue can be addressed at a future date after a significant modification is submitted to MCESD.

C. County Rule 320 - Odors and Gaseous Air

- 1) Discussion:
County Rule 320 §§300, 302 and 303, entitled "Standards", "Material Containment Required" and "Reasonable Stack Height Required", respectively, apply to this facility and have been incorporated into the permit conditions. Permit conditions based on County Rule 320 §300 are locally enforceable only.
- 2) Monitoring
The Department's complaint line is used to monitor for compliance with these requirements. In addition, the facility is required to keep a log of offsite odor complaints that must be reported to the Department in the semiannual monitoring report.

E. County Rule 331 and SIP Rule 331

The permit requires degreasers to be cold cleaners, use low VOC solvents or be sealed systems. The facility has one cold cleaner without an internal reservoirs and compliant solvents

The permit contains Sections 301 thru 305 and Section 307 of the rule. Since there are no inline cleaners or emission control systems, these are not addressed. Section 501 of the Rule is included to cover the monitoring.

E. County Rule 342 and SIP Rule 342 – Coating of Wood Furniture and Fixtures

- 1) Discussion
The Permittee chose to show compliance with this Rule by the use of compliant coatings and the use of compliant coatings is the only operating scenario in the permit. All the requirements of the Rule are included in the permit with the exception of those that deal with alternative operating scenarios, emission control devices and small sources since they are not applicable requirements.

2) Monitoring

Rule 342 is a recent rule and its incorporation into the permit provides adequate monitoring and recordkeeping to demonstrate compliance with its applicable requirements. However, because the allowable emission level of the permit approaches the applicable requirement, the recordkeeping becomes more stringent than that required by Rule 342 as the 12 month rolling total of VOC emissions approached the limit. At 220 tons, the recordkeeping goes to weekly.

F. MACT STANDARD SUBPART JJ

Subpart JJ is applicable to Mastercraft because they are a wood manufacturing operation that is a major source for HAPs. Currently Mastercraft complies with the MACT standard by using the averaging compliance option. The Title V Permit contains an alternative operating scenario which allows the source to change the compliance option to the compliant coating scenario in the MACT standard without a modification.

G. POTENTIALLY APPLICABLE REQUIREMENTS

Emission generating activities that are infrequent and not associated with the business conducted at the facility are not required to be covered by the permit. Although not required to be in the Permit, Mastercraft would still be required to comply with all applicable requirements if the activities were to be conducted. Mastercraft has voluntarily accepted conditions to cover architectural coating, abrasive blasting and asphalt paving so that the applicable requirements for these potential activities are clearly presented in the permit.

Any requests to increase the VOC limit of 454 tons per year would be considered a relaxation of an enforceable limit which Mastercraft accepted to avoid compliance with NSR (i.e. A 52.21(r)(4) or SIP equivalent situation). Such a relaxation would subject Mastercraft to NSR (i.e. LAIR and Offsets) as a new source.

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TECHNICAL SUPPORT DOCUMENT

Mastercraft Cabinets, Inc.
305 South Brooks Circle
Mesa, AZ 85202

Permit Number V97-004
Significant Revision S05-013
April 17, 2006

SUMMARY OF SIGNIFICANT REVISION

Mastercraft currently receives prefabricated unfinished cabinets from their sister company in Aurora, Colorado facility. Mastercraft finishes the cabinets by sanding and coating the product for delivery to the end user. There are woodworking operations at the facility but they currently are primarily used for manufacturing missing or broken pieces for the end user.

This modification proposes the removal of the existing flat spray coating line (5 spray booths) to be replaced with a hanging spray coating line which includes the installation of 9 new spray booths. Mastercraft is also proposing to add numerous pieces of woodworking equipment. This will enable the plant to produce cabinets from raw material and will no longer be reliant for unfinished cabinets from the Colorado facility. This modification will increase production in woodworking by an estimated 219%. This number is based on the estimated wood processing currently performed at the Colorado facility that will soon be performed at Mastercraft. The hanging line is more efficient in regards to overspray than the existing flat line. It is estimated that the new hanging line will decrease overspray between 30-40%. This decrease has been documented by actual operating data from Medallion Cabinets located in Waconia, Minnesota, which has previously installed the hanging line technology. This will translate to a direct decrease in VOC emissions at Mastercraft on a per unit basis.

ATTAINMENT DESIGNATION FOR CRITERIA POLLUTANTS

Mastercraft is located in an area that has been designated as attainment or unclassified for CO, SO₂, serious nonattainment for PM₁₀ and basic nonattainment for the 8-hour ozone standard (see July 1, 2004 version of 40 CFR 81.303). The "basic" classification indicates that the area meets the current 1-hour ozone standard, but does not meet the 8-hr standard.

Mastercraft is a major source for VOC and HAP emissions.

DESCRIPTION OF SIGNIFICANT REVISION

Mastercraft is removing the flat spray coating line and also increasing woodworking operating capacity. The change at the facility will be performed in three phases. The initial phase will be the removal of the flat spray coating line, the installation of the new hanging spray coating line and the removal, replacement and addition of woodworking equipment specified in the equipment list in Appendix C. The installation of new woodworking equipment involved in the initial phase must be installed and ducted to the existing baghouse. The existing baghouse must be tested for compliance with Rule 311 within 180 days from the date of the commencement of the installation of the woodworking equipment. The new woodworking equipment that is to be installed in Phase 1 of the project will use the existing control system. Mastercraft may revise the list of the specific equipment installed as long as: 1) the changes involve only equipment permitted by this permit revision, 2) the changes are documented in the monthly reports submitted to MCAQD and

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3) the additional equipment does not exceed the capacity of the existing baghouse. The following changes are being made in "Phase 1".

Equipment to be replaced with similar equipment:

- (1) Timesaving Sanding Machine
- (3) Unisaw Table Saws
- (1) Panel Saw
- (2) Sanding Table

Equipment to be removed:

- (1) Edge Bander
- (4) Finish Line Blowing Devices

New Equipment / Replacement equipment:

- 48" side belt cross grain sander
- Belt Sander
- Panel Saw
- Side Boring Machine
- Edge bander
- CNC – Plywood Machining
- (3) Dado Saws
- Top/Btm notcher
- Toe Kick notcher
- Sliding Table Saw
- Small Shaper
- Automatic Boring Machine

Other Changes:

Install a splitter, "T", in the ductwork on blower 1 of the ECS. This gives Mastercraft the option to vent outdoors.

Mastercraft is required to submit monthly progress reports identifying the equipment installed or removed and the control system operating scenario used for each piece of equipment. The monthly reports are only required for months in which changes have been made at the facility. The "Phase 1" facility changes will conclude after the performance testing for compliance with County Rule 311 has been completed.

The "Phase 2" facility changes will incorporate the additional equipment contained in this permit revision. This additional equipment will utilize the (4) currently permitted portable baghouse units for particulate emission control. Mastercraft is required to submit monthly progress reports detailing the changes at the facility for every month that changes were made. Phase 2 can continue until "Phase 3" begins or the portable baghouse units have reached capacity.

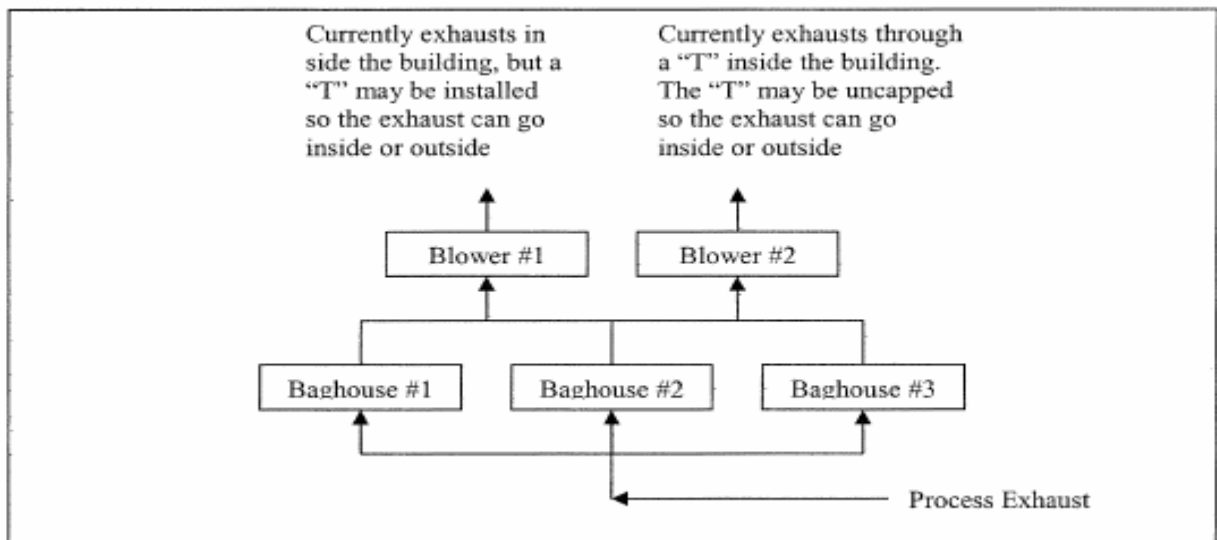
After the completion of Phase 1 of this project, if additional woodworking equipment is routed to the existing baghouse for particulate control, Mastercraft will be required to adhere to the appropriate permitting procedure requirements for each change. A performance test of the baghouse under the revised operating conditions may be required to show compliance with County Rule 311.

The Phase 3 consists of the addition of a new baghouse and the additional woodworking equipment. Mastercraft must notify MCAQD of the date when commencement of construction of the new baghouse occurs and the date that the baghouse has achieved the capacity to operate at its maximum production rate on a sustained basis. A performance test is required within 60 days after the new baghouse has achieved the capability to operate at its maximum production rate on a sustained basis but no later than 180 days after the initial start up of the baghouse. The initial startup of the baghouse will be the date construction of the control device commences.

DESCRIPTION OF CURRENT EMISSION (PARTICULATE) CONTROL SYSTEM

Currently Mastercraft has one emission control system (ECS) for particulate. The ECS includes two blowers and three fabric filter sections. The exhaust currently vents inside the manufacturing facility. Mastercraft plans to install a valve to control airflow from the effluent of the ECS for personal comfort reasons. This will enable the facility to retain heating or cooling inside the building when desired and vent to the ambient air at other times. A diagram of the control is outlined in Figure 1. Testing is required to ensure the ECS is functioning properly.

FIGURE 1:



APPLICABLE RULE REQUIREMENTS

County Rule 241

Mastercraft is subject to County Rule 241 (BACT) Requirements. Mastercraft currently controls particulate matter (PM) and will continue to be control PM in a manner that complies with MCAQD BACT requirements (baghouses). The potential to emit for particulate has been calculated to be 2.2 tons per year. A performance test at Mastercraft has quantified PM emissions to be 0.156 pounds per day. The PTE has been calculated using this number and is shown below;

$$0.156 \frac{\text{pounds}}{\text{hour}} \times 8760 \frac{\text{hours}}{\text{year}} \times (1 + 219\%) \times \frac{1}{2000} \frac{\text{ton}}{\text{pound}} = 2.2 \frac{\text{tons}}{\text{year}}$$

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The potential particulate pound per hour increase is calculated to be;

$$0.156 \frac{\text{pounds}}{\text{hour}} \times 219\% = 0.34 \frac{\text{pounds}}{\text{day}}$$

The potential VOC emissions from the new spray booths exceed the County Rule 241 (BACT) threshold of 25 TPY and 135 lbs/day. Mastercraft is currently permitted at a 245 tpy and 32.7 tons per month for allowable emissions for VOC. The current actual emissions from the facility were calculated to be 141.1 tpy. This was calculated using the 2003 (154.6 tons) and 2004 (127.5 tons) actual VOC reported emissions and averaging the two numbers as shown below:

$$(154.6 \text{ tpy} + 127.5 \text{ tpy}) / 2 = 141.1 \text{ tpy}$$

Mastercraft has agreed to not exceed the 25 TPY and 150 lb/day VOC emission increase thresholds in Rule 241 to avoid applying BACT for this permit revision. The current actual emissions can be increased by 22.5 tons and allow Mastercraft to stay below 90% of the annual BACT threshold of 25 tpy for VOC. Therefore, Mastercraft has voluntarily accepted a VOC limit of 163.6 tons per year, based on the following:

$$141.1 \text{ tpy} + (90\% \times 25 \text{ tpy}) = 163.6 \text{ tpy}$$

County Rule 241 allows for an increase of VOC emissions of up to 150 pounds per day for VOC emissions without a requirement to apply best available control technology (BACT). Mastercraft is avoiding the BACT requirement by voluntarily accepting a daily VOC limit. The daily allowable emission increase was calculated by assessing the daily emissions for each month in the 2003 and 2004 calendar years and then adding 135 pounds per day (90% of the 150 lbs/day BACT threshold) to the daily emission calculation in order to remain below the 150 pound per day threshold.

The past actual daily emissions were estimated using the actual monthly emissions for the each emitting unit of the facility. The monthly emissions were divided by the number of operating days each month for each emissions area. The result was 24 different daily emission average numbers during the two year period for each emission area. The highest calculated daily emissions for each emission unit during the 24 month period were summed to quantify the previous actual daily emission. Table 1 displays each of the emission units and the highest calculated daily VOC emissions for each unit during the 24 month period. For example, if a spray booth emitted 8,783 pounds during a month and operated 26 days for that month, the daily emission rate would be 338 pounds for that month as shown below.

$$8,783 \text{ lbs VOC} / \text{month} / 26 \text{ days} = 338 \text{ pounds VOC}$$

In order for Mastercraft to remain below the Rule 241 daily threshold for VOC emissions, they have voluntarily accepted an increase of 135 lbs/day. This results in a daily allowable VOC emission limit of 2,397 lbs/day VOC emissions.

The calculation of the daily emission limit is discussed in the letter from Mastercraft, dated March 6, 2006, to this Department (attached to this TSD in Attachment 1) and in the following table. A daily limit of 2,397 pounds per day for VOC emissions was added to the Title V permit.

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TABLE 1:

Unit	Highest Daily VOC Emission Average (pounds/day)	Month When Highest Average Occurred
Stain Spray Booths	640	June 2004
Sealer Spray Booth	405	June 2004
Laquer Spray Booth	450	August 2004
Hand Spray Booth	59	April 2003
Band Cleaner	708	January 2004
Hand Painting / no booth	1	May 2004
Total	2,262	

$$2,262 \frac{\text{pounds}}{\text{day}} + 90\% \times 150 \frac{\text{pounds}}{\text{day}} = 2,397 \frac{\text{pounds}}{\text{day}}$$

Compliance with the daily VOC limit will be demonstrated by totaling each month VOC emissions and dividing by the number of days the manufacturing facility operated for that month. An example of this is shown below of the calculation assuming 45,240 pounds of VOC were emitted during the month and Mastercraft operated 26 days during that month:

$$45,240 \frac{\text{pounds}}{\text{month}} \times \frac{1}{26} \frac{\text{month}}{\text{day}} = 1,740 \frac{\text{pounds}}{\text{day}}$$

The monthly VOC limit has been removed because the daily VOC limit is a more stringent requirement and therefore the monthly VOC limit is no longer necessary.

County Rule 240

The major modification threshold is 40 tpy for VOC emissions. Mastercraft voluntarily accepted a VOC limit to restrict their emission increase to less than 25 tpy to avoid County Rule 241 requirements. This voluntary limit also allows Mastercraft to avoid County Rule 240 (NSR) applicability.

County Rule 311

Testing will be required after the additions and changes in woodworking equipment are completed associated with the existing baghouse. Mastercraft will be required to show compliance with County Rule 311 with the results of this source test. If a new baghouse is installed, Mastercraft will be required to test the new baghouse in order to show compliance with County and SIP Rule 311 emission limits.